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Guide to Canada's Energy Efficiency Regulations



guide



Naturai Hesource Canada

Office of Energy

Ressources naturelles Canada

Office de l'efficacité énergétique







This guide provides general information about the requirements of the *Energy Efficiency Act* and the *Energy Efficiency Regulations*. Please read the *Energy Efficiency Act* and the *Energy Efficiency Regulations* to determine their precise requirements.

You will find the Energy Efficiency Act in the Statutes of Canada 1992, Chapter 36, and the Energy Efficiency Regulations in the Canada Gazette, Part II, Volume 128, Number 22, November 2, 1994. Amendments to the Energy Efficiency Regulations were published in the Canada Gazette, Part II, Volume 129, Number 24, November 29, 1995, in the Canada Gazette, Part II, Volume 131, Number 25, December 10, 1997, and in the Canada Gazette, Part II, Volume 133, Number 1, January 6, 1999. Copies of the Statutes of Canada and the Canada Gazette are available in many public and university libraries and may be purchased in some bookstores.

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ATTENTION

Please make note of the following changes:

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How to report, and to whom:

Housing, Buildings and Regulations Division

Office of Energy Efficiency, Natural Resources Canada 580 Booth Street, 18th Floor, Ottawa, ON K1A 0E4 Canada Fax: (613) 947-0373

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The following organizations are currently accredited by SCC to certify electrical and electronic products, fuel-burning equipment, or gas-fired appliances and equipment. They have been recognized by NRCan as administrators of an energy performance verification program:

- Air-Conditioning and Refrigeration Institute (ARI)
- CSA International (CSA)
- Intertek Testing Services NA Inc.
- Intertek Testing Services NA Ltd.
- Underwriters Laboratories Inc. (ULI)

p. 15

• annual energy consumption in kWh (kilowatt hours per cycle multiplied by **392** cycles per year);

p. 21

• annual energy consumption in kWh (kilowatt hours per cycle multiplied by 416 cycles per year for dryers and 392 cycles per year for washers);

p. 48

MANUF-1HP-2-enclosed;



Foreword

Canada's Energy Efficiency Act was passed by Parliament in 1992 and provides for the making and enforcement of regulations concerning minimum energy performance levels for energy-using products, as well as the labelling of energy-using products and the collection of data on energy use. Energy efficiency is an important way all sectors of the economy and individual consumers can contribute to Canada's economic and environmental objectives. By using less energy, Canada will reduce emissions of greenhouse gases, which have been linked to a warming of the earth's climate. Energy efficiency is therefore a key element of Canada's climate change strategy. Energy efficiency also has important economic benefits. By saving consumers money and reducing business operating costs, it contributes to Canada's competitiveness in domestic and international markets, which in turn leads to job creation. The energy efficiency industry itself is an important source of jobs and income for Canadians.

The first Energy Efficiency Regulations came into effect in February 1995, following extensive consultations with the provincial governments, affected industries, utilities, environmental groups and others. These Regulations establish energy efficiency standards for a wide range of energy-using products, with the objective of eliminating the least energy-efficient products from the Canadian market. They apply to regulated energy-using products imported into Canada or manufactured in Canada and shipped from one province to another. The Regulations continue to apply to an energy-using product even if it has been incorporated into another product.

As of January 1999, the *Energy Efficiency Regulations*, which are administered by Natural Resources Canada (NRCan), had been amended several times (see side bar).

This guide provides basic information on the *Energy Efficiency Regulations*, including the amendments of November 1995, November 1997 and December 1998. **Part One** of the guide outlines the administrative requirements of the Regulations in terms of reporting requirements, labelling, verification marks and exemptions from the *Energy Efficiency Act*. **Part Two** details the technical and reporting requirements of the Regulations for each type of regulated energy-using product.

AMENDMENTS TO THE ENERGY EFFICIENCY REGULATIONS

- in November 1995, to include general service fluorescent lamps and general service incandescent reflector lamps;
- in November 1997, to strengthen and clarify the Regulations as they apply to electric motors and to simplify administrative requirements for motor dealers; and
- in December 1998, to introduce minimum energy efficiency standards for 15 energy-using products and to increase the existing energy efficiency standard for two products.

Web site: http://regulations.nrcan.gc.ca

This guide is not intended to be an exhaustive explanation of the *Energy Efficiency Act* or the *Energy Efficiency Regulations*. Complete information on the Act can be found in the *Statutes of Canada 1992*, Chapter 36. The *Energy Efficiency Regulations* were published in the *Canada Gazette*, Part II, Volume 128, Number 22, November 2, 1994, with the above-noted amendments published in the *Canada Gazette*, Part II, Volume 129, Number 24, November 29, 1995, the *Canada Gazette*, Part II, Volume 131, Number 25, December 10, 1997, and the *Canada Gazette*, Part II, Volume 133, Number 1, January 6, 1999. Copies of the *Statutes of Canada* and the *Canada Gazette* are available in most public and university libraries and may be purchased in some bookstores.

For more information on the application of the federal *Energy Efficiency Act, Energy Efficiency Regulations* or energy efficiency labelling, write to:

Residential, Regulatory and Information Programs Division Office of Energy Efficiency Natural Resources Canada 580 Booth Street, 18th Floor Ottawa, ON K1A 0E4 Canada

or fax your request to (613) 947-0373.

Information on the Act and Regulations, as well as other federal energy efficiency initiatives, is also available by visiting the Office of Energy Efficiency's web site at http://oee.nrcan.gc.ca.

Nova Scotia, New Brunswick, Quebec, Ontario and British Columbia also regulate energy-using products. In some cases, **provincial regulations** may differ from the federal requirements or may apply to other types of energy-using equipment. It should be noted that the federal *Energy Efficiency Regulations* do not take precedence over provincial regulations. You should be aware of the requirements of both federal and provincial regulations, where applicable. For information on energy efficiency regulations in the provinces where you do business, write to the provincial department of energy.

Introduction to the Regulations

Part One

Regulated products

The *Energy Efficiency Regulations* apply to the following types of energy-using products:

- automatic ice-makers;
- clothes dryers;
- · clothes washers;
- · dehumidifiers;
- dishwashers;
- electric motors (1 to 200 HP/0.746 to 150 kW);
- electric ranges;
- electric water heaters;
- fluorescent lamp ballasts;
- · general service fluorescent lamps;
- · general service incandescent reflector lamps;
- freezers;
- gas boilers;
- · gas furnaces;
- gas ranges;
- gas water heaters;
- · ground- or water-source heat pumps;
- integrated over/under washer-dryers;
- · internal water-loop heat pumps;
- large air conditioners, heat pumps and condensing units;
- · oil-fired boilers;
- oil-fired furnaces;
- oil-fired water heaters;
- packaged terminal air conditioners and heat pumps;
- refrigerators and combination refrigerator-freezers;
- room air conditioners;
- single-phase and three-phase single-package central air conditioners and heat pumps; and
- single-phase and three-phase split-system central air conditioners and heat pumps.

All these energy-using products must meet federal energy efficiency standards in order to be imported into Canada or manufactured in Canada and shipped from one province to another. The Regulations continue to apply to these products if they are incorporated into a larger unit or machine, even when that unit or machine is an unregulated product.

Who is affected by the Regulations?

Responsibilities of dealers

IN SUMMARY, THE DEALER MUST:

- ensure the product meets the energy efficiency standard specified in the Regulations;
- ensure an energy efficiency report has been filed with NRCan;
- provide the necessary information to Revenue Canada, Customs Excise and Taxation, when importing products;
- ensure the product bears an energy efficiency verification mark; and
- ensure an EnerGuide label is affixed to the product (if prescribed by the Regulations.)

The Energy Efficiency Regulations apply to dealers who import into Canada or ship from one Canadian province to another the aforementioned energy-using products. A dealer is defined in the Energy Efficiency Act as a "person engaged in the business of

- (a) manufacturing energy-using products in Canada;
- (b) importing energy-using products into Canada; or
- (c) selling or leasing energy-using products obtained directly or indirectly from a person engaged in a business described in a) or b) or an agent thereof."

Dealers are responsible for ensuring that each model of a regulated product that they manufacture for sale in another province, import into Canada, or sell or lease after the product has been imported or shipped interprovincially meets the **energy efficiency standard** set out in the Regulations. Depending on the product, dealers may also be responsible for ensuring that an **EnerGuide label** is affixed to each unit. As well, all energy-using products must carry an energy efficiency **verification mark**.

Section 5 of the Act requires that a dealer importing any of the regulated energy-using products or transporting them between provinces send an **energy efficiency report** to Natural Resources Canada, unless a report has already been submitted for that model of product. Furthermore, the Regulations require that the energy efficiency report be submitted **before** the product is imported into Canada or shipped between provinces. The report must include all of the information set out in Schedule IV of the Regulations. A summary of the Schedule IV requirements is listed for each type of energy-using product in Part Two of this guide.

If the product is **imported**, additional information, as outlined in Part VI of the Regulations and summarized under "Reporting requirements" on the next page, must be included in a customs release document at the time of importation.

There are three reasons a dealer may be exempt from the provisions of the Act. These exemptions are detailed on page 10 under "Exemptions from the Act" and in Fact Sheet 4 – "Exemptions from the *Energy Efficiency Regulations.*"

Energy efficiency standards

The prescribed **energy efficiency standard** for each regulated product is listed in Schedule I of the Regulations and in the tables in Part Two of this guide. Part Two also lists the following:

- the definition of each product covered by the Regulations;
- the Canadian Standards Association (CSA), Canadian Gas
 Association (CGA) or other standard, where applicable, that
 must be used to test the product's energy efficiency to ensure
 that it complies with the minimum requirements of the
 Regulations;
- the date by which the product must meet the prescribed energy efficiency standard (compliance date);
- the information that must be reported in the energy efficiency report; and
- information on whether or not an EnerGuide label is required and the availability of an EnerGuide directory.

Reporting requirements

The *Energy Efficiency Regulations* require that dealers comply with the following two reporting requirements:

- before shipping an energy-using product interprovincially or importing it, the dealer must ensure that an energy efficiency report has been filed with NRCan; and
- 2) when importing an energy-using product into Canada, dealers must include the information required in Part VI of the *Energy Efficiency Regulations* in a **customs release document**.

An energy efficiency report must be submitted only when a product is not already listed in the NRCan database. Dealers can determine whether an energy-using product is listed in the NRCan database by writing or faxing to the address on the following page, or via the Internet at http://Sec5.nrcan.gc.ca.

NRCAN'S LIST OF COMPLIANT PRODUCTS

Product information contained in the energy efficiency report is entered into a database at NRCan to determine compliance with the *Energy Efficiency Regulations*. Products that are compliant may be imported into Canada or shipped between provinces.

NRCan's List of Compliant Products can be accessed at http://sec5.nrcan.gc.ca.

NOTE: INCOMPLETE DOCUMENTS

If the customs release document is not complete or if the product does not meet energy efficiency standards, the customs officer can refuse to allow the product to clear customs.

1) Energy efficiency report

There is no specific format for an energy efficiency report, as reporting requirements differ depending on the product. NRCan will accept the information prescribed by the Regulations in any format preferred by the dealer.

When to report: Before an energy-using product has been imported or shipped between provinces.

What to report: See Part Two of this guide for details on each energy-using product.

How to report, and to whom: By hand or mail, on hard copy or on diskette in Lotus 1-2-3 or Excel formats, or by fax to:

Residential, Regulatory and Information Programs Division Office of Energy Efficiency, Natural Resources Canada 580 Booth Street, 18th Floor, Ottawa, ON K1A 0E4 Canada Fax: (613) 947-0373

Refer to Fact Sheet 1 – "Energy Efficiency Reports Under Section 5 of the *Energy Efficiency Act*," for further details.

2) Customs release document

In addition to the energy efficiency report, dealers importing a regulated energy-using product must submit a **customs release document** (e.g., a customs or commercial invoice, bill of sale, or price list).

When to report: Upon importing the energy-using product into Canada.

What to report:

- type of product (see the list of energy-using products on page 4);
- model number*;
- brand name, if any;
- name and address of the dealer who is importing the product; and
- the purpose for which the product is being imported. This must be one of the following three purposes:
 - 1) for sale or lease in Canada without modification;
 - 2) for sale or lease in Canada after being modified to comply with the prescribed energy efficiency standard; or
 - 3) for use as a component in a product being exported from Canada.

^{*} For electric motors, the customs release document should indicate the product's unique motor identifier, or UMI, instead of the model number. For a definition of UMI, see page 47 or refer to Fact Sheet 6 – "Electric Motors and the *Energy Efficiency Regulations*."

How to report, and to whom: A completed customs release document and a copy must be submitted to Revenue Canada, Customs, Excise and Taxation. Customs release information that is filed electronically will be processed and subsequently transmitted electronically to NRCan.

Refer to Fact Sheet 2 – "Importing an Energy-Using Product into Canada," for further details.

Verification mark

All regulated energy-using products imported into Canada or shipped between provinces must carry an **energy efficiency verification mark** from a recognized certification organization. An energy efficiency verification mark indicates only that the energy performance of the product has been verified; it is not a safety certification mark. The verification mark must be put on the exterior of the product.

To authorize an energy efficiency verification mark, a certification organization must be accredited by the Standards Council of Canada (SCC) and must administer an acceptable energy performance verification program for the product. The following organizations are currently accredited by SCC to certify electrical and electronic products, fuel-burning equipment, or gas-fired appliances and equipment:

- The CSA International (CSA)
- The Canadian Gas Association (CGA)
- MET Laboratories, Inc. (MET)
- Underwriters Laboratories of Canada (ULC)
- Underwriters Laboratories Inc. (ULI)
- Intertek Testing Services NA Inc.
- Intertek Testing Services NA Ltd.
- Air-Conditioning and Refrigeration Institute (ARI)

The energy efficiency verification mark can be placed on a product as soon as the product has met the terms of the applicable energy performance verification program. At the latest, the dealer must ensure that the verification mark is on the product before the product leaves the dealer's possession or, if the product has been passed on to a consignee, before it leaves the consignee's possession.

Refer to Fact Sheet 3 – "Verification Marks for Energy Efficiency" for further details.

Labelling requirements

For more information on the EnerGuide Label or the EnerGuide Program, visit the EnerGuide web site at: http://energuide.nrcan.gc.ca.

The Act and Regulations require dealers to attach an **EnerGuide label** to the following energy-using products:

- clothes dryers;
- · clothes washers;
- integrated over/under washer-dryers;
- dishwashers:
- · electric ranges;
- · freezers;
- refrigerators and combination refrigerator-freezers; and
- · room air conditioners.

A dealer who imports one of these products or ships it from one Canadian province to another must ensure the product is properly labelled. The label must remain on the product until it is sold at the retail level or leased.

In the case of appliances, the EnerGuide label shows the consumer the estimated annual energy consumption of the product in kilowatt hours. Room air conditioner labels indicate the energy efficiency ratio (EER) of the particular model. This information allows consumers to compare products and to make choices that will save them both money and energy over the life of the product.

EnerGuide labels also have the following components:

- a bar scale comparing the model's energy consumption to other models available in the marketplace that are part of the same test group;
- the energy consumption of the most energy-efficient model and the least energy-efficient model in the same test group, in accordance with the labelling scale published annually by NRCan;
- the test group type and size category (cooling capacity category, in the case of room air conditioners); and
- the model number.

The *Energy Efficiency Regulations* specify the exact size, shape and colour of the EnerGuide label, the size of the print on the label, the type of label that may be used (adhesive, flap or hang tag) and how it is to be placed on the product. The label must be easy to see when the appliance is viewed from the front.

The energy consumption information displayed on EnerGuide labels is also provided to consumers, salespeople, distributors and manufacturers through two EnerGuide directories: one for major appliances and another for room air conditioners. These directories are published by NRCan and rank the available models in decending order, from the most energy-efficient to the least energy-efficient.

Refer to Fact Sheet 5 – "EnerGuide Labels for Energy-Using Products" for further details.

Exemptions from the Act

Under certain circumstances, a dealer importing or shipping energyusing products between provinces can be exempted from submitting an energy efficiency report to NRCan and the product can be exempted from meeting the prescribed energy efficiency standard.

Exemptions apply if:

- 1) a dealer is importing or shipping between provinces an energy-using product that will be modified to meet the energy efficiency standard.
 - In this case, the dealer has 90 days to ensure that the product is modified and meets the energy efficiency standard. Within 120 days after the product was imported or shipped, the dealer must submit an energy efficiency report to NRCan.*
- 2) a dealer is importing or shipping between provinces an energyusing product that will be incorporated into another product and then exported from Canada.
 - In this case, the dealer has 90 days to ensure that the product is exported from Canada. Within 120 days after the product was imported or shipped between provinces, the dealer must send proof to NRCan that the product has been exported.* A copy

^{*} Motor dealers are exempt from these time limits to export the product and to provide proof of export. However, the dealer must keep a record of the name and address of the person from whom the product was obtained, the quantity and description of the product, the date the product was received by the dealer, the date the dealer sold the product, and the name and address of the purchaser. Information concerning a non-compliant motor must be provided to NRCan on request. As well, dealers may not sell at the retail level or lease within Canada a non-compliant motor or a product that contains a non-compliant motor.

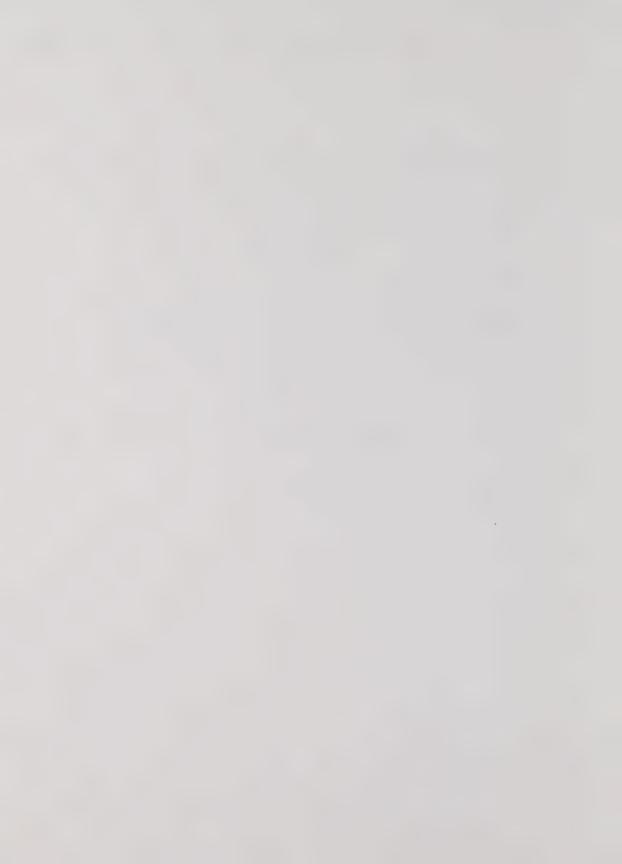
of the customs document B-13A or a copy of the bill of lading are acceptable proofs of export. The document submitted must include the following information:

- type of product (see the list of energy-using products on page 4);
- model number*;
- brand name, if any; and
- manufacturer's name.
- 3) a dealer is importing or shipping between provinces an energy-using product, only to export it from Canada. Dealers who import energy-using products or ship them from one province to another in order to export them directly out of Canada do not have to comply with the Regulations.

If none of these exemptions apply, the dealer must meet the legislative requirements summarized on pages 5 and 6.

Refer to Fact Sheet 4 – "Exemptions from the *Energy Efficiency Regulations*" for further details.

^{*} For electric motors, the customs release document must include the product's unique motor identifier (UMI) instead of the model number. Refer to page 47 or to Fact Sheet 6 – "Electric Motors and the *Energy Efficiency Regulations*," for further details.



Technical Requirements for Energy-Using Products



Household appliances

APPLIES TO

standard and compact electrically operated and electrically heated household tumble-type clothes dryers.

TEST STANDARD

CAN/CSA-C361-92

COMPLIANCE DATE

May 1, 1995, for standard clothes dryers December 31, 1998, for compact clothes dryers

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Clothes dryers

PRODUCT CLASS	MINIMUM EF May 1, 1995	
	(kg/kWh)	(lb/kWh)
Standard clothes dryer (≥ 125-litre capacity)	1.36	3.01
	December	31, 1998
Compact clothes dryer (< 125-litre capacity)		
120 V 240 V	1.42 1.31	3.13 2.90

Where EF = Energy Factor

- type of product (clothes dryer);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the clothes dryer verification and authorized the verification mark that will be affixed to the clothes dryer;
- annual energy consumption in kWh (kilowatt hours per cycle multiplied by 416 cycles per year);
- if manufactured on or after May 1, 1995, energy factor in kg/kWh;
- test group (i.e., size category);
- nominal voltage;
- · volume of drum in litres; and
- type of drying control (i.e., timed, auto-temperature or auto-moisture).

standard or compact electrically operated household clothes washers that are topor front-loaded, and that have an internal control system that regulates the water temperature without the need for user intervention subsequent to initiation of machine operation.

TEST STANDARD

CAN/CSA-C360-98

COMPLIANCE DATE

May 1, 1995

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Clothes washers

PRODUCT CLASS	MINIMUM EF May 1, 1995	
	(L/kWh/cycle)	(cu. ft./kWh/cycle
Compact (< 45-litre capacity)	25.48	0.90
Standard (≥ 45-litre capacity)	33.41	1.18

Where EF = Energy Factor

- type of product (clothes washer);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the clothes washer verification and authorized the verification mark that will be affixed to the clothes washer;
- annual energy consumption in kWh (kilowatt hours per cycle multiplied by 416 cycles per year);
- if manufactured after May 1, 1995, energy factor in L/kWh/cycle;
- test group (i.e., size category);
- volume of clothes container in litres;
- temperature selections (e.g., hot/cold, warm/cold) offered by the clothes washer; and
- special cycle/water level or suds-saver controls offered by the clothes washer.

electrically operated automatic household dishwashers that are not commercial, industrial or institutional machines

TEST STANDARD

CAN/CSA-C373-92

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required required

not required

ENERGUIDE DIRECTORY

available

not available

Dishwashers

MINIMUM EF February 3, 1995	
(cycle/kWh)	
0.62	
0.46	

Where EF = Energy Factor (cycles per kilowatt hour)

- type of product (dishwasher);
- brand name:
- model number;
- manufacturer;
- name of the organization or province that carried out the dishwasher verification and authorized the verification mark that will be affixed to the dishwasher;
- annual energy consumption in kWh (kilowatt hours per cycle multiplied by 322 cycles per year);
- test group (i.e., size category);
- · volume of hot water used in litres; and
- whether the dishwasher is compact or standard.

household ranges that are:

- a) free-standing appliances equipped with one or more surface elements and one or more ovens:
- b) built-in appliances equipped with one or more surface elements and one or more ovens:
- built-in appliances equipped with one or more ovens and no surface elements:
- d) wall-mounted appliances equipped with one or more ovens and no surface elements; or
- e) counter-mounted appliances equipped with one or more surface elements and no ovens;

but does not include the following:

- f) microwave cooking appliance;
- g) appliances designed for an electrical supply of 120 volts; or
- h) household appliances with one or more tungsten-halogen heating elements.

TEST STANDARD

CAN/CSA-C358-95

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required required

not required

FNERGUIDE DIRECTORY

available

not available

Electric ranges

PRODUCT CLASS	MAXIMUM E February 3, 1995
Free-standing or built-in ranges with one or more surface elements and one or more ovens	0.93V + 14.3
Built-in or wall-mounted ranges without surface elements and with one or more ovens	38
Counter-mounted ranges without ovens and with one or more surface elements on a conventional (i.e., not modular) cooktop	34
Counter-mounted ranges without ovens and with one or more surface elements on a modular (i.e., cartridge that can be plugged into a receptacle on the range surface) cooktop	43

Where V = Volume of oven in litres

E = Maximum allowable energy consumption in kilowatt hours per month (kWh/month)

- type of product (electric range);
- brand name:
- model number:
- manufacturer;
- name of the organization or province that carried out the electric range verification and authorized the verification mark that will be put affixed to electric range;
- · annual energy consumption in kWh; and
- test group, type of range.

Electric ranges (continued)

For free-standing or built-in ranges with one or more surface elements and one or more ovens:

- whether the range is free-standing or built-in;
- · volume of usable oven space; and
- whether the cooktop is conventional, smooth, solid or modular.

For built-in or wall-mounted ranges with one or more ovens and no surface elements:

- whether the range is built-in or wall-mounted;
- whether the range has a single or double oven or a double oven with a microwave upper oven; and
- volume of usable oven space in each oven.

For counter-mounted range with one or more surface elements and no ovens:

• whether the cooktop is conventional, smooth, solid or modular.

household freezers that have a capacity of not more than 850 litres (30 cubic feet).

TEST STANDARD

CAN/CSA-C300-M91

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Freezers

PRODUCT CLASS	MAXIMUM ANNUAL ENERGY CONSUMPTION February 3, 1995
	(kilowatt hours per year)
Upright freezers with manual defrost	10.3 AV + 264
Upright freezers with automatic defrost	14.9 AV + 391
Chest freezers and all other freezers	11.0 AV + 160

Where AV = Adjusted volume of freezer in cubic feet = 1.73 V_{freezer}

- type of product (freezer);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the freezer verification and authorized the verification mark that will be affixed to the freezer;
- annual energy consumption in kWh;
- whether it is an upright freezer, with either manual or automatic defrost, or a chest or other type of freezer;
- total refrigerated volume;
- · adjusted volume; and
- freezing capacity in kilograms of ice per 24 hours.

household propane or natural gas ranges with electrical power sources that are used for food preparation and that have one or any combination of:

- a) top or surface cooking;
- b) oven cooking; or
- c) broiling.

TEST STANDARD

None

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Gas ranges

No continuously burning pilot light if product has a cord set

- type of product (gas range);
- brand name;
- model number;
- manufacturer;
- volume of usable oven space in litres;
- whether the range is built-in or free-standing; and
- whether the broilers are open or closed.

household appliances with a clothes washer component and a clothes dryer component located either above or below the clothes washer. The appliances have only one power source and controls on either the washer or dryer.

TEST STANDARD

washer component: CAN/CSA-C360-98 dryer component: CAN/CSA-C361-92

COMPLIANCE DATE

May 1, 1995

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Integrated over/under washer-dryers

PRODUCT CLASS		MINIMUM EF May 1, 1995	
		(kg/kWh)	(lbs/kWh)
Standard dryer (≥ 125-litre capacity)		1.36	3.01
Compact dryer (< 125-litre capacity)	120 V 240 V	1.42 1.31	3.13 2.90
		(L/kWh/cycle)	(cu. ft./kWh/cycle)
Standard washer (≥ 45-litre capacity)		33.41	1.18
Compact washer (< 45-litre capacity)		25.48	0.90

Where EF = Energy Factor

- type of product (integrated over/under washer-dryer);
- · brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the washer-dryer verification and authorized the verification mark that will be affixed to the washer-dryer;
- annual energy consumption in kWh (kilowatt hours per cycle multiplied by 416 cycles per year);
- if manufactured after May 1, 1995, energy factor in kg/kWh for clothes dryers, and L/kWh/cycle for clothes washers;
- test group (i.e., size category);
- volume of dryer drum and washer clothes container in litres;
- type of drying control on the dryer (i.e., timed, auto-temperature, or auto-moisture);
- temperature selections (e.g., hot/cold, warm/cold) offered by the washer; and
- special cycle/water level or suds-saver controls offered by the washer.

household refrigerators or combination refrigerator-freezers that have a capacity of not more than 1100 litres (39 cubic feet), with the exception of refrigerators that employ an absorption refrigeration system.

TEST STANDARD

CAN/CSA-C300-M91

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Refrigerators and combination refrigerator-freezers

PRO	DDUCT CLASS	MAXIMUM ANNUAL ENERGY CONSUMPTION February 3, 1995
		(kilowatt hours per year)
1)	Refrigerators and refrigerator-freezers with manual defrost	13.5 AV + 299
2)	Refrigerator-freezers with partial automatic defrost	10.4 AV + 398
3)	Refrigerator-freezers with automatic defrost with top-mounted freezer and without through-the-door ice service, and all refrigerators with automatic defrost	16.0 AV + 355
4)	Refrigerator-freezers with automatic defrost with side-mounted freezer and without through-the-door ice service	11.8 AV + 501
5)	Refrigerator-freezers with automatic defrost with bottom-mounted freezer and without through-the-door ice service	16.5 AV + 367
6)	Refrigerator-freezers with automatic defrost with top-mounted freezer and with through-the-door ice service	17.6 AV + 391
7)	Refrigerator-freezers with automatic defrost with side-mounted freezer and with through-the-door ice service	16.3 AV + 527

Where AV = Adjusted volume of the refrigerator in cubic feet = V_{fresh food} + AF V_{freezer}

V_{fresh food} = Volume of fresh food compartment in cubic feet

V_{freezer} = Volume of freezer compartment in cubic feet

AF = 1.0 for refrigerators without a freezing compartment;

^{1.44} for a single-door refrigerator with an internal freezing compartment; and

^{1.63} for combination refrigerator-freezers.

Refrigerators and combination refrigerator-freezers (continued)

- type of product (refrigerator or combination refrigeratorfreezer);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the refrigerator or refrigerator-freezer verification and authorized the verification mark that will be affixed to the refrigerator or refrigerator-freezer;
- annual energy consumption in kWh;
- type of refrigerator or refrigerator-freezer, using one of seven product classes on the previous page to describe the type;
- volume of the fresh food compartment;
- volume of the freezer compartment, if there is one;
- total volume of the refrigerator or refrigerator-freezer; and
- adjusted volume of the refrigerator or refrigerator-freezer.

Water heaters

APPLIES TO

stationary electric storage tank water heaters with a capacity of not less than 50 litres (11 imperial gallons) and not more than 450 litres (100 imperial gallons) that are intended for use on a pressure system.

TEST STANDARD

CAN/CSA-C191.1-M90

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Electric water heaters

PRODUCT CLASS

MAXIMUM ALLOWABLE STANDBY LOSS

February 3, 1995

(W)

50 to 270 litres

61 + 0.20V

271 to 450 litres

0.472V - 12.5

Where V = Volume of storage tank in litres W = Watts

- type of product (electric water heater);
- brand name;
- model number;
- manufacturer:
- name of the organization or province that carried out the water heater verification and authorized the verification mark that will be affixed to the water heater;
- volume of the storage tank in litres;
- · rated watt input; and
- standby loss in watts.

stationary gas-heated water containers with a capacity of not less than 76 litres (20 U.S. gallons) and not more than 380 litres (100 U.S. gallons) that use propane or natural gas and that have an input rating of not more than 21.97 kW (75 000 Btu/h).

TEST STANDARD

CAN1-4.1-M85

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Gas water heaters

PRODUCT CLASS

MINIMUM EF February 3, 1995

Input rating ≤ 21.97 kW (75 000 Btu/h)

0.62 - 0.0005V

Where EF = Energy factor calculated as a dimensionless quantity V = Volume of storage tank in litres

- type of product (gas water heater);
- brand name;
- model number;
- manufacturer:
- name of the organization or province that carried out the gas water heater verification and authorized the verification mark that will be affixed to the water heater;
- volume of the storage tank in litres;
- input rating;
- recovery efficiency;
- energy factor calculated as a dimensionless quantity; and
- whether propane or natural gas is the fuel used.

oil-fired water heaters that have an input rating of not more than 30.5 kilowatts (0.75 U.S. gallons per hour) and storage capacity of not more than 190 litres (50 U.S. gallons).

TEST STANDARD

CAN/CSA-B211-M90

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Oil-fired water heaters

PRODUCT CLASS

MINIMUM EF February 3, 1995

Input rating ≤ 30.5 kW (0.75 U.S. gallons per hour)

0.59 - 0.0005V

Where EF = Energy factor calculated as a dimensionless quantity; V = Volume of storage tank in litres.

- type of product (oil-fired water heater);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the water heater verification and authorized the verification mark that will be affixed to the water heater;
- volume of the storage tank in litres;
- input rating;
- · recovery efficiency; and
- energy factor calculated as a dimensionless quantity.

Heating and air-conditioning equipment

APPLIES TO

automatic operating gas-fired central forced-air furnaces that use propane or natural gas and have an input of not more than 117.23 kW (400 000 Btu/h), but does not include furnaces for mobile homes or recreational vehicles.

TEST STANDARD

CAN/CGA-2.3-M93

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Gas furnaces

PRODUCT CLASS	MINIMUM AFUE February 3	MINIMUM TE 5, 1995
≤ 65.92 kW (225 000 Btu/h) using single-phase electric current	78%	
≤ 65.92 kW (225 000 Btu/h) using three-phase electric current	78 % or	80%
> 65.92 kW (225 000 Btu/h) but ≤ 117.23 kW (400 000 Btu/h)		80%

Where AFUE = annual fuel utilization efficiency TE = thermal efficiency

- type of product (residential gas furnace);
- brand name:
- model number;
- manufacturer;
- name of the organization or province that carried out the furnace verification and authorized the verification mark that will be affixed to the furnace;
- heating capacity;
- either the annual fuel utilization efficiency or the thermal efficiency; and
- whether the furnace configuration is upflow, downflow, horizontal or lowboy.

self-contained gas-fired boilers that use propane or natural gas, are intended for use in a low-pressure steam or hot water central heating system, and have an input rate of less than 88 kilowatts (300 000 Btu/h).

TEST STANDARD

CGA P.2-1991

COMPLIANCE DATE

December 31, 1998

For verification mark - June 30, 1999

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Gas boilers

PRODUCT CLASS	MINIMUM AFUE December 31, 1998
Low-pressure steam systems	≥ 75%
Hot water systems	≥ 80%

Where AFUE = Annual fuel utilization efficiency

- type of product (gas boiler);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the boiler verification and authorized the verification mark that will be affixed to the boiler;
- type of fuel used by the product (propane or natural gas);
- type of boiler system (low-pressure steam or hot water);
- input rate in kW (Btu/h); and
- annual fuel utilization efficiency.

oil-fired warm-air furnaces, other than furnaces for mobile homes or recreational vehicles, that have an input rate of less than or equal to 66 kilowatts (225 000 Btu/h).

TEST STANDARD

CAN/CSA-B212-M93

COMPLIANCE DATE

December 31, 1998

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

onot available

Oil-fired furnaces

PRODUCT CLASS

MINIMUM SEUE December 31, 1998

≤ **66 kW** (225 000 Btu/h)

≥ 78%

Where SEUE = Seasonal energy utilization efficiency

- type of product (oil-fired furnace);
- · brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the furnace verification and authorized the verification mark that will be affixed to the furnace;
- input rate in kW (Btu/h); and
- seasonal energy utilization efficiency.

oil-fired boilers that are intended for use in a low-pressure steam or hot water central heating system and have an input rate of less than or equal to 88 kilowatts (300 000 Btu/h).

TEST STANDARD

CAN/CSA-B212-M93

COMPLIANCE DATE

December 31, 1998

For verification mark - June 30, 1999

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

ont available

Oil-fired boilers

PRODUCT CLASS

MINIMUM SEUE December 31, 1998

≤ **88 kW** (300 000 Btu/h)

≥ 80%

Where SEUE = Seasonal energy utilization efficiency

- type of product (oil-fired boiler);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the boiler verification and authorized the verification mark that will be affixed to the boiler;
- input rate in kW (Btu/h); and
- seasonal energy utilization efficiency.

ground- or water-source heat pumps that are factory-built single packages or split-system matching assemblies rated at a capacity of less than 35 kW (120 000 Btu/h) and are intended for use in open- or closed-loop ground- or water-source systems.

TEST STANDARD

CAN/CSA-C446-M90

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Ground- or water-source heat pumps

PRODUCT CLASS	MINIMUM EER	MINIMUM COP
	February 3,	1995
Cooling		
All units (10°C)	11.0	3.2
Closed loop (25°C)	10.5	3.1
Heating		
0	not annicable	3.0
All units (10°C)	not applicable	5.0
Closed loop (0°C)	not applicable	2.5

Where EER = Energy efficiency ratio — a ratio calculated by dividing the cooling capacity in Btu per hour by the power input in watts at any given set of rating conditions

COP = Coefficient of performance – a ratio for both the cooling and heating modes calculated by dividing the capacity expressed in watts by the power input in watts, excluding any supplementary heat

- type of product (ground- or water-source heat pump);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the heat pump verification and authorized the verification mark that will be affixed to the heat pump;
- cooling capacity;
- heating capacity;
- Air-Conditioning and Refrigeration Institute (ARI) category;
- energy efficiency ratio;
- coefficient of performance; and
- whether the heat pump is to be used in a closed-loop or open system, or both a closed-loop and open system.

water-source heat pumps that are factory-built single packages or split-system matching assemblies that are intended for installation in internal water-loop systems and do not exceed 40 kilowatts (135 000 Btu/h) in cooling or heating capacity.

TEST STANDARD

CAN/CSA-C655-M91

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Internal water-loop heat pumps

PRODUCT CLASS	MINIMUM EER cooling	MINIMUM COP heating		
	February 3, 1995			
≤ 40 kW (135 000 Btu/h)	10.0	3.8		

- Where EER = Energy efficiency ratio a ratio calculated by dividing the cooling capacity in Btu per hour by the power input in watts at any given set of rating conditions
 - COP = Coefficient of performance a ratio for both the cooling and heating modes calculated by dividing the capacity expressed in watts by the power input in watts, excluding any supplementary heat

- type of product (internal water-loop heat pump);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the heat pump verification and authorized the verification mark that will be affixed to the heat pump;
- voltage;
- cooling capacity;
- heating capacity;
- Air-Conditioning and Refrigeration Institute (ARI) category;
- energy efficiency ratio; and
- coefficient of performance.

factory-assembled commercial and industrial unitary air conditioners, heat pumps and air-conditioning condensing units that have a cooling or heating capacity of more than 19.0 kilowatts (65 000 Btu/h) but less than 73.0 kilowatts (250 000 Btu/h). Classifications are detailed in CAN/CSA-C746-98.

TEST STANDARD

CAN/CSA-C746-98

COMPLIANCE DATE

December 31, 1998

ENERGUIDE LABEL

required not required

ENERGUIDE DIRECTORY

available

not available

Large air conditioners, heat pumps and condensing units

PRODUCT CLASS	December 31, 1998	Minimum Efficiency			
ARI TYPE CLASSIFICATION	COOLING CAPACITY RANGE kW (1000 BTU/H)	EER	COP AT 8.3°C	COP AT -8.3°C	IPLV
SP-A, RC-A	> 19 \le 40 (> 65 \le 135)	8.9			8.3
SP-A, RC-A	> 40 < 73 (> 135 < 250)	8.5			7.5
RCU-A-C	> 19 \le 40 (> 65 \le 135)	8.9			8.3
SPY-A, RCY-A	> 19 \le 40 (> 65 \le 135)	8.9			8.3
SPY-A, RCY-A	> 40 < 73 (> 135 < 250)	8.3			7.5
RCU-A-CB, RCUY-A-CB	> 19 \le 40 (> 65 \le 135)	8.9			8.3
RCU-A-CB, RCUY-A-CB	> 40 < 73 (> 135 < 250)	8.3			7.5
SP-E, SP-W, RC-E, RC-W	> 19 \le 40 (> 65 \le 135)	10.5			9.7
SP-E, SP-W, RC-E, RC-W	> 40 < 73 (> 135 < 250)	9.6			9.0
SPY-E, SPY-W, RCY-E, RCY-W	> 19 \le 40 (> 65 \le 135)	10.5			9.7
SPY-E, SPY-W, RCY-E, RCY-W	> 40 < 73 (> 135 < 250)	9.6			9.0
RCU-E-C, RCU-W-C	> 19 \le 40 (> 65 \le 135)	10.5			9.7
RCU-E-CB, RCU-W-CB, RCUY-E-CB, RCUY-W-CB	> 40 < 73 (> 135 < 250)	9.6			9.0
HSP-A	> 19 \le 40 (> 65 \le 135)	8.9	3.0	2.0	8.3
HSP-A	> 40 < 73 (> 135 < 250)	8.5	2.9	2.0	7.5
HRC-A-C, HRCU-A-C, HRC-A-CB	> 19 \le 40 (> 65 \le 135)	8.9	3.0	2.0	8.3
HRCU-A-CB	> 19 \le 40 (> 65 \le 135)	8.9	3.0	2.0	8.3
HRCU-A-CB	> 40 < 73 (> 135 < 250)	8.3	2.9	2.0	7.5
RCU-E, RCU-W	> 40 < 73 (> 135 < 250)	12.9			12.9
RCU-A	> 40 < 73 (> 135 < 250)	9.9			11.0

Where EER = Energy efficiency ratio

COP = Coefficient of performance

IPLV = Integrated part-load value

Large air conditioners, heat pumps and condensing units (continued)

- type of product (large air conditioner, heat pump or condensing unit);
- brand name;
- model number;
- manufacturer:
- name of the organization or province that carried out the air conditioner, heat pump or condensing unit verification and authorized the verification mark that will be affixed to the air conditioner, heat pump or condensing unit;
- cooling capacity in kW (Btu/h);
- heating capacity (if a heat pump) in kW (Btu/h);
- Air-Conditioning and Refrigeration Institute (ARI) classification;
- integrated part-load value (IPLV);
- energy efficiency ratio;
- coefficient of performance at 8.3°C (if a heat pump); and
- coefficient of performance at -8.3°C (if a heat pump).

factory-assembled packaged terminal air conditioners and heat pumps intended for use in residential, commercial and industrial heating and cooling systems.

TEST STANDARD

CAN/CSA-C744-93

COMPLIANCE DATE

December 31, 1998

ENERGUIDE LABEL

required

onot required

ENERGUIDE DIRECTORY

available

not available

Packaged terminal air conditioners and heat pumps

PRODUCT CLASS

MINIMUM EER

MINIMUM COP

December 31, 1998

Cooling

9.115 - 0.0000638*CAPc

Heating

2.75 - 0.00001*CAPh

Where EER = Energy efficiency ratio - a ratio calculated by dividing the cooling capacity in Btu per hour (Btu/h) by the power input in watts at any given set of rating conditions

COP = Coefficient of performance – a ratio for both the cooling and heating modes calculated by dividing the capacity expressed in watts by the power input in watts, excluding any supplementary heating

CAPc = The sensible and latent cooling capacity in Btu/h

CAPh = The heating capacity in Btu/h

- type of product (packaged terminal air conditioner or heat pump);
- brand name:
- model number:
- manufacturer:
- name of the organization or province that carried out the air conditioner or heat pump verification and authorized the verification mark that will be affixed to the air conditioner or heat pump;
- Air-Conditioning and Refrigeration Institute (ARI) classification;
- cooling capacity (if a heat pump) in kW (Btu/h);
- heating capacity in kW (Btu/h);
- · standard energy efficiency ratio; and
- standard coefficient of performance (if a heat pump).

single-phase electric room air conditioners that are not "packaged terminal air conditioners" and that do not exceed 10.55 kilowatts (36 000 Btu/h).

TEST STANDARD

CAN/CSA-C368.1-M90

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Room air conditioners

PRODUCT CLASS	MINIMUM EER February 3, 1995	
Units with louvred sides		
Less than 6 001 Btu/h	8.0	
6 001 to 7 999 Btu/h	8.5	
8 000 to 9 999 Btu/h	9.0	
10 000 to 11 999 Btu/h	9.0	
12 000 to 13 999 Btu/h	9.0	
14 000 to 16 999 Btu/h	8.8	
17 000 to 19 999 Btu/h	8.8	
20 000 to 36 000 Btu/h	8.2	
Units without louvred sides		
Less than 5 999 Btu/h	8.0	
6 000 to 8 999 Btu/h	8.5	
9 000 to 9 999 Btu/h	8.5	
10 000 to 19 999 Btu/h	8.5	
20 000 to 36 000 Btu/h	8.2	

Where EER = Energy efficiency ratio – a ratio calculated by dividing the cooling capacity, in Btu per hour, by the power input in watts at any given set of rating conditions

- type of product (room air conditioner);
- brand name;
- model number:
- manufacturer;
- name of the organization or province that carried out the room air conditioner verification and authorized the verification mark that will be affixed to the room air conditioner:
- whether the unit does or does not have louvred sides;
- power input in amperes;
- cooling capacity in Btu per hour;
- · energy efficiency ratio; and
- whether the unit functions on 120 or 240 volts.

factory-assembled single-phase and three-phase single-package central air conditioners and heat pumps (air-sink and air-source only) that have a rated cooling or heating capacity of less than 19.0 kilowatts (65 000 Btu/h).

TEST STANDARD

CAN/CSA-C656-M92

COMPLIANCE DATE

February 3, 1995, for single-phase units December 31, 1998, for three-phase units

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

onot available

Single-phase and three-phase single-package central air conditioners and heat pumps

PRODUCT CLASS	MINIMUM SEER MINIMUM HSPF December 31, 1998	
Air conditioners	9.7	
Heat pumps cooling mode	9.7	
heating mode (Region V)	5.7	

Where SEER = Seasonal energy efficiency ratio – the total cooling of a central air conditioner or heat pump in Btu during its normal annual usage period for cooling, divided by the electric power usage in watt-hours during the same period

HSPF = Heating seasonal performance factor – the total heating output of a heat pump during its normal annual usage period for heating, divided by the total electric power input in watt-hours during the same time period

- type of product (single-phase or three-phase, single-package central air conditioner or heat pump);
- brand name;
- model number;
- manufacturer:
- name of the organization or province that carried out the air conditioner or heat pump verification and authorized the verification mark that will be affixed to the air conditioner or heat pump;
- Air-Conditioning and Refrigeration Institute (ARI) classification;
- phase of electric current the product uses;
- cooling capacity in kW (Btu/h);
- heating capacity (if a heat pump) in kW (Btu/h);
- · seasonal energy efficiency ratio; and
- heating seasonal performance factor (if a heat pump).

factory-assembled single-phase and three-phase split-system central air conditioners and heat pumps (air-sink and air-source only) that have a rated cooling or heating capacity of less than 19.0 kilowatts (65 000 Btu/h).

TEST STANDARD

CAN/CSA-C273.3-M91

COMPLIANCE DATE

December 31, 1998 Single-phase Heat Pumps – February 3, 1995

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Single-phase and three-phase split-system central air conditioners and heat pumps

PRODUCT CLASS	MINIMUM SEER SINGLE-PHASE	MINIMUM HSPF MINIMUM SEER SINGLE-PHASE THREE-PHASE December 31, 1998	MINIMUM HSPI THREE-PHASE
Air conditioners	10	10	
Heat pumps cooling mode heating mode	10	10 5.9	5.9
(Region V)			

Where SEER = Seasonal energy efficiency ratio – the total cooling of a central air conditioner or heat pump in Btu during its normal annual usage period for cooling, divided by the electric power usage in watt-hours during the same period

HSPF = Heating seasonal performance factor – the total heating output of a heat pump during its normal annual usage period for heating, divided by the total electric power input in watt-hours during the same time period

- type of product (single-phase or three-phase split-system central air conditioner or heat pump);
- brand name;
- model number:
- manufacturer;
- name of the organization or province that carried out the air conditioner or heat pump verification and authorized the verification mark that will be affixed to the air conditioner or heat pump;
- · cooling capacity;
- heating capacity (if a heat pump);
- Air-Conditioning and Refrigeration Institute (ARI) classification;
- seasonal energy efficiency ratio; and
- heating seasonal performance factor (if a heat pump).

Other energy-using products

APPLIES TO

factory-assembled automatic ice-makers that have a standard capacity rating of between 23 and 1000 kilograms per day (kg/d), including self-contained and split-system machines that produce cubed, flaked, crushed or fragmented ice, in either a batch or continuous process. Ice-makers installed in household refrigerators, refrigerator-freezers or freezers, automatic ice-dispensing machines and cold-plate drink dispensers are excluded.

TEST STANDARD

CAN/CSA-C742-98

COMPLIANCE DATE

December 31, 1998

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

Automatic ice-makers

PRODUCT CLASS

Category/capacity, kg/day

MAXIMUM ENERGY INPUT

kj/kg

December 31, 1998

Batch automatic ice-makers (cubers)

Air-cooled $23 \leq \text{capacity} < 150 \text{ kg/d}$ $1630 - 6.008 \times \text{capacity}$ $150 \leq \text{capacity} \leq 1000 \text{ kg/d}$ $807.2 - 0.5229 \times \text{capacity}$ Water-cooled $23 \leq \text{capacity} < 150 \text{ kg/d}$ $1234 - 4.381 \times \text{capacity}$

621.8 - 0.2985 x capacity

Continuous automatic ice-makers (flakers)

 $150 \le \text{capacity} \le 1000 \text{ kg/d}$

Air-cooled $23 \le \text{capacity} < 300 \text{ kg/d} \\ 300 \le \text{capacity} \le 1000 \text{ kg/d} \\ 875.2 - 1.122 \times \text{capacity} \\ 538.6$ Water-cooled $23 \le \text{capacity} < 300 \text{ kg/d} \\ 300 \le \text{capacity} \le 1000 \text{ kg/d} \\ 471.2$

- type of product (automatic ice-maker);
- brand name:
- model number:
- manufacturer;
- name of the organization or province that carried out the ice-maker verification and authorized the verification mark that will be affixed to the ice-maker;
- capacity in kilograms of ice per day;
- product category (one cabinet or split-system);
- product process type (batch or continuous);
- the product cooling mechanism (air-cooled or water-cooled);
 and
- the input energy rating in kj/kg (kWh/100 lb).

electrically operated, mechanically refrigerated dehumidifiers that have a daily water-removal capacity of up to 30 litres (6.6 imperial gallons). Desiccant dehumidifiers, compressed air dehydrators, and dehumidifiers used in skating rinks, indoor swimming pools and other commercial and industrial applications are excluded.

TEST STANDARD

CAN/CSA-C749-94

COMPLIANCE DATE

December 31, 1998

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Dehumidifiers

PRODUCT CLASS

MINIMUM EF

December 31, 1998

 \leq 30 L

 \geq 1.0 L/kWh

Where EF = A measure of the energy efficiency of a dehumidifier calculated by dividing the water removed from the air by the energy consumed, measured in L/kWh

- type of product (residential dehumidifier);
- brand name;
- model number:
- manufacturer;
- name of the organization or province that carried out the dehumidifier verification and authorized the verification mark that will be affixed to the dehumidifier;
- rated daily water-removal capacity in litres; and
- energy factor in L/kWh.

fluorescent lamp ballasts that are:

- a) designed for input voltages of 120, 277 or 347 volts, and
- b) intended to operate with F32T8, F34T12, F40T10 or F40T12 rapidstart fluorescent lamps or F96T12IS, F96T12ES, F96T12H0 or F96T12H0 ES fluorescent lamps.

TEST STANDARD

CAN/CSA-C654-M91

COMPLIANCE DATE

February 3, 1995

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Fluorescent lamp ballasts

APPLICATION FOR OPERATION OF	BALLAST INPUT VOLTAGE	TOTAL NOMINAL LAMP WATTS February 3, 1995	MINIMUM BALLAST EFFICACY FACTOR
One F40T12 lamp¹	120 V	40 W	1.805
	277 V	40 W	1.805
	347 V	40 W	1.750
Two F40T12 lamps ¹	120 V	80 W	1.060
	277 V	80 W	1.050
	347 V	80 W	1.020
Two F96T12 lamps ²	120 V	150 W	0.570
	277 V	150 W	0.570
	347 V	150 W	0.560
Two 110W F96T12H0 lamps ³	120 V	226 W	0.390
	277 V	226 W	0.390
	347 V	226 W	0.380
Two F32T8 lamps	120 V	64 W	1.250
	277 V	64 W	1.230
	347 V	64 W	1.230

Note: All fluorescent lamp ballasts must have a power factor of at least 0.90 over the indicated input voltage range.

- 1. Also for use on 34W/48T12/RS and 40W/48T10/RS lamps
- 2. Also for use on 60W/96T12/IS lamps
- 3. Also for use on 95W/96T12/H0 lamps

Fluorescent lamp ballasts (continued)

- type of product (fluorescent lamp ballast);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the fluorescent lamp ballast verification and authorized the verification mark that will be affixed to the fluorescent lamp ballast;
- ballast efficacy factor;
- with which of the following fluorescent lamps the product is designed to operate:
 - i) F32T8 rapid start;
 - ii) F34T12 rapid start;
 - iii) F40T10 rapid start;
 - iv) F40T12 rapid start;
 - v) F96T12IS;
 - vi) F96T12ES;
 - vii) F96T12HO; or
 - viii)F96T12HO ES;
- number of fluorescent lamps the ballast is designed to operate;
 and
- for which of the following ballast input voltages is product designed:
 - i) 120 volts;
 - ii) 277 volts; or
 - iii) 347 volts.

- a) a rapid-start straight-shaped fluorescent lamp with a nominal overall length of 1200 mm (48 inches), a medium bi-pin base and a nominal power of not less than 28 W;
- b) a rapid-start straight-shaped fluorescent lamp with a nominal overall length of 2400 mm (96 inches), a recessed double-contact base, a nominal power of not less than 95 W and a nominal current of 0.8 A:
- c) a rapid-start U-shaped fluorescent lamp with a nominal overall length of not less than 560 mm (22 inches) and not more than 635 mm (25 inches), a medium bi-pin base and a nominal power of not less than 28 W;
- d) an instant-start straight-shaped fluorescent lamp with a nominal overall length of 2400 mm (96 inches), a single-pin base and a nominal power of not less than 52 W; and
- e) any fluorescent lamp that is a physical and electrical equivalent of a lamp described in paragraph (a), (b), (c) or (d);

but does not include:

- f) a fluorescent lamp that is specifically marked and marketed for plantgrowth use;
- g) a cold-temperature fluorescent lamp;
- h) a coloured fluorescent lamp;
- i) a fluorescent lamp designed to be impact-resistant;
- j) a reflectorized or aperture fluorescent lamp;
- k) a fluorescent lamp designed for use in reprographic equipment;
- a fluorescent lamp primarily designed to produce ultraviolet radiation; or
- m) a fluorescent lamp with a colourrendering index of 82 or greater.

General service fluorescent lamps

LAMP TYPE	NOMINAL LAMP WATTAGE	MINIMUM AVERAGE CRI	MINIMUM AVERAGE LAMP EFFICACY (Im/W)
1200 mm (48 in.)	> 35 W	69	75.0
medium bi-pin base	≤ 35 W	45	75.0
560 to 635 mm (22 to 25 in.)	> 35 W	69	68.0
U-shaped	≤ 35 W	45	64.0
2400 mm (96 in.) high output, recessed double-contact base	> 100 W ≤ 100 W	69 45	80.0 80.0
2400 mm (96 in.)	> 65 W	69	80.0
slimline, single-pin base	≤ 65 W	45	80.0

Where CRI = colour-rendering index lm/W = lumens per watt

Requirements for the energy efficiency report, as listed in Schedule IV of the Regulations

For both rapid-start and instant-start fluorescent lamps:

- type of product (general service fluorescent lamps);
- · brand name;
- model number:
- · manufacturer: and
- name of the organization or province that carried out the fluorescent lamp verification and authorized the verification mark that will be affixed to the product or the product packaging.

In addition, the following requirements apply for **rapid-start fluorescent lamps**:

- nominal power;
- shape of product (one of the following):
 - (a) straight-shape; or
 - (b) U-shape;
- nominal length;
- diameter;

TEST STANDARD

ANSI/CGA/CIE/CSA/IES

Standard

ANSI C78.1, ANSI 78.3

ANSI C78.375

ANSI C82.3

CIE 13.3

IES LM9

IES LM16

IES LM58

COMPLIANCE DATE

February 1, 1996

ENERGUIDE LABEL

required

on not required

ENERGUIDE DIRECTORY

available

not available

General service fluorescent lamps (continued)

- type of base (one of the following):
 - (a) a medium bi-pin base; or
 - (b) a recessed double-contact base;
- abbreviation under the designation system in ANSI C78.1 Annex A;
- correlated colour temperature;
- average colour-rendering index; and
- average lamp efficacy.

For instant-start fluorescent lamps, the following requirements apply:

- nominal power;
- diameter:
- abbreviation under the designation system in ANSI C78.3 Annex A;
- correlated colour temperature;
- average colour-rendering index; and
- average lamp efficacy.

an incandescent reflector lamp

- a) with an R bulb shape, a PAR bulb shape or a bulb shape similar to R or PAR that is neither ER nor BR, as described in ANSI C79.1:
- b) with an E26 medium-screw base:
- c) with a nominal voltage or voltage range that lies at least partially between 100 volts and 150 volts;
- d) with a diameter greater than 70 mm (2.75 inches); and
- e) that has a nominal power of not less than 40 W and not more than 205 W;

but does not include:

- f) a coloured incandescent reflector lamp; or
- g) an incandescent reflector lamp that
 - i) is of the rough or vibration service type with:
 - (A) a C-11 filament, as described in the IES Handbook, with five supports exclusive of lead wires;
 - (B) a C-17 filament, as described in the IES Handbook, with eight supports exclusive of lead wires;
 - (C) a C-22 filament, as described in the IES Handbook, with 16 supports exclusive of lead wires;
 - (ii) is of the neodymium oxide type;
 - (iii) has a coating or other containment system to retain glass fragments if the lamp is shattered and is specifically marked and marketed as an impact-resistant lamp;
 - (iv) is specifically marked and marketed for plant growth use and has a spectral power distribution that:
 - (A) is different from that of the lamps described in paragraghs (a) to (e); and
 - (B) promotes the growth of plants; or

General service incandescent reflector lamps

RATED WATTAGE	MINIMUM AVERAGE LAMP EFFICACY (Im/W)	
40 - 50	10.5	
51 - 66	11.0	
67 - 85	12.5	
86 - 115	14.0	
116 - 155	14.5	
156 - 205	15.0	

Where Im/W = lumens per watt

- (v) is specifically marked and marketed
 - (A) as an infrared heat lamp;
 - (B) for heat-sensitive use;
 - (C) for mine use; or
 - (D) for aquarium, terrarium or vivarium use.

TEST STANDARD

CAN/CSA-C862-95

COMPLIANCE DATE

April 1, 1996

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

General service incandescent reflector lamps (continued)

- type of product (general service incandescent reflector lamp);
- brand name;
- model number;
- manufacturer;
- name of the organization or province that carried out the incandescent reflector lamp verification and authorized the verification mark that will be affixed to the product or the product packaging;
- · lamp description;
- nominal power and voltage;
- lamp class as specified in ANSI C78.21, Table 1 of Part II;
 and
- average lamp efficacy.

- a) a continuous-duty operation, open or enclosed, electric induction motor of the polyphase, squirrel cage, National Electrical Manufacturers Association (NEMA) design A or B type, that is designed to operate at a single speed and that has:
 - (i) two, four or six poles;
 - (ii) a rated voltage of not more than 600 volts;
 - (iii) a rated frequency of 50/60 hertz or 60 hertz:
 - (iv) a rated power of not less than 1 HP and not more than 200 HP;
 - (v) a T-frame;
 - (vi) a standard shaft, an R-shaft or an S-shaft;
 - (vii) a foot mounting, a type C facemounting or a type D flangemounting; and
 - (viii) an IP code from 00 to 66; or
- b) a maximum continuous rating, open or enclosed, electric motor of the three-phase, cage, International Electrotechnical Commission (IEC) design N type and SI-duty type, that is designed to operate at a single speed, that is either flange-mounted or foot-mounted, and that has:
 - (i) two, four or six poles;
 - (ii) a rated voltage of not more than 600 volts;
 - (iii) a rated frequency of 50/60 hertz or 60 hertz;
 - (iv) a rated power of not less than 0.746 kilowatts and not more than 150 kilowatts;
 - (v) a frame number of 90 or above; and
 - (vi) an IP code from 00 to 66.

Electric motors (1 to 200 HP/0.746 to 150 kW)

Requirements for the energy efficiency report, as listed in Schedule IV of the Regulations

- type of product (electric motor from 1 to 200 HP or 0.746 to 150 kilowatts);
- brand name;
- unique motor identifier (see definition below);
- manufacturer: and
- name of the organization that carried out the motor energy efficiency verification and authorized the verification mark that will be affixed to the motor.

For motors manufactured on or after February 3, 1995, and before November 27, 1997, in addition to the preceding information the energy efficiency report must include:

- · rated load; and
- quoted efficiency value.

For motors manufactured on or after November 27, 1997, in addition to the preceding information the energy efficiency report must include:

nominal efficiency value.

Unique motor identifier (UMI)

For electric motors, a unique motor identifier (UMI) is required instead of the product's model number when reporting information in an energy efficiency report or on a customs release document. The UMI applies to motors manufactured on or after November 27, 1997, and is comprised of the following information, in this sequence:

- the name of the manufacturer, in abbreviated form;
- the power of the motor (indicated in HP for NEMA motors and in kilowatts for IEC motors);
- the number of poles; and
- whether the motor is open or enclosed.

TEST STANDARD

CAN/CSA-C390-93

COMPLIANCE DATE

November 27, 1997

For explosion-proof motors and motors contained within an integral gear assembly, the compliance date is November 27, 1999.

ENERGUIDE LABEL

required

not required

ENERGUIDE DIRECTORY

available

not available

Electric motors (1 to 200 HP/0.746 to 150 kW) (continued)

The following are examples of UMIs for NEMA and IEC motors, respectively:

- MANUF-1HP-2-closed; and
- MANUF-3kW-6-open.

Only one report must be filed for all motors that have the same UMI.

Energy Efficiency Standards for NEMA Motors Minimum nominal efficiency

POWER (HP)				ENCLOSED		
	2-POLE	4-POLE	6-POLE	2-POLE	4-POLE	6-POLE
1	75.5	82.5	80.0	75.5	82.5	80.0
1.5	82.5	84.0	84.0	82.5	84.0	85.5
2	84.0	84.0	85.5	84.0	84.0	86.5
3	84.0	86.5	86.5	85.5	87.5	87.5
5	85.5	87.5	87.5	87.5	87.5	87.5
7.5	87.5	88.5	88.5	88.5	89.5	89.5
10	88.5	89.5	90.2	89.5	89.5	89.5
15	89.5	91.0	90.2	90.2	91.0	90.2
20	90.2	91.0	91.0	90.2	91.0	90.2
25	91.0	91.7	91.7	91.0	92.4	91.7
30	91.0	92.4	92.4	91.0	92.4	91.7
40	91.7	93.0	93.0	91.7	93.0	93.0
50	92.4	93.0	93.0	92.4	93.0	93.0
60	93.0	93.6	93.6	93.0	93.6	93.6
75	93.0	94.1	93.6	93.0	94.1	93.6
100	93.0	94.1	94.1	93.6	94.5	94.1
125	93.6	94.5	94.1	94.5	94.5	94.1
150	93.6	95.0	94.5	94.5	95.0	95.0
175	94.5	95.0	94.5	95.0	95.0	95.0
200	94.5	95.0	94.5	95.0	95.0	95.0

Electric motors (1 to 200 HP/0.746 to 150 kW) (continued)

Energy Efficiency Standards for IEC Motors (Including Frame 100) Minimum Nominal Efficiency

POWER (KW)	OPEN			ENCLOSED		
	2-POLE	4-POLE	6-POLE	2-POLE	4-POLE	6-POLE
0.75	75.5	82.5	80.0	75.5	82.5	80.0
1.1	82.5	84.0	84.0	82.5	84.0	85.5
1.5	84.0	84.0	85.5	84.0	84.0	85.5
2.2	84.0	84.0	86.5	85.5	84.0	87.5
3.0	84.0	84.0	86.5	85.5	84.0	87.5
3.7	85.5	87.5	87.5	87.5	87.5	87.5
4.0	85.5	87.5	87.5	87.5	87.5	87.5
5.5	87.5	88.5	88.5	88.5	89.5	89.5
7.5	88.5	89.5	90.2	89.5	89.5	89.5
11	89.5	91.0	90.2	90.2	91.0	90.2
15	90.2	91.0	91.0	90.2	91.0	90.2
18.5	91.0	91.7	91.7	91.0	92.4	91.7
22	91.0	92.4	92.4	91.0	92.4	91.7
30	91.7	93.0	93.0	91.7	93.0	93.0
37	92.4	93.0	93.0	92.4	93.0	93.0
45	93.0	93.6	93.6	93.0	93.6	93.6
55	93.0	94.1	93.6	93.0	94.1	93.6
75	93.0	94.1	94.1	93.6	94.5	94.1
90	93.6	94.5	94.1	94.5	94.5	94.1
110	93.6	95.0	94.5	94.5	95.0	95.0
132	94.5	95.0	94.5	95.0	95.0	95.0
150	94.5	95.0	94.5	95.0	95.0	95.0

For more information

Helpful web sites

- Energy Efficiency Regulations: http://regulations.nrcan.gc.ca
- Office of Energy Efficiency: http://oee.nrcan.gc.ca





Under Section 5 of the Energy Efficiency Act

WHO IS A "DEALER"?

A "dealer" is a person whose business:

- a. manufactures energy-using products in Canada; or
- b. imports energy-using products into Canada; or
- c. sells or leases energy-using products that are obtained, directly or indirectly, from a person who manufactures energy-using products in Canada or imports them into Canada.

REGULATED ENERGY-USING PRODUCTS

The Regulations specify the following as energy-using products:

- automatic ice-makers;
- clothes dryers;
- clothes washers;
- dehumidifiers;dishwashers;
- » electric motors (1 to 200 HP/0.746
- electric ranges;
- electric water heaters;
- fluorescent lamp ballasts;
- general service fluorescent lamps;
- general service incandescent reflector lamps;
- , freezers;
- " gas boilers;
- gas furnaces;
- gas ranges;

(continued overleaf)

The Energy Efficiency Act and the Energy Efficiency Regulations set energy efficiency standards for specified energy-using products and provide descriptions of the responsibilities of dealers for these products. For household appliances and room air conditioners, the Act and the Regulations also require dealers to attach an EnerGuide label to their product.

A dealer who imports a specified energy-using product into Canada, or ships such a product from one Canadian province to another, must be sure that the product meets the prescribed energy efficiency standard.

What is an energy efficiency report?

Section 5 of the Act requires that an energy efficiency report be sent to Natural Resources Canada (NRCan) before an energy-using product is imported into Canada or shipped between provinces. The report describes the energy-using product and provides information on its energy efficiency. The energy efficiency report should include the following:

- product type (from the list on page 4 of Guide to Canada's Energy Efficiency Regulations);
- brand name;
- model number*:
- manufacturer;
- name of the organization or province that carried out the product energy performance verification and authorized the verification mark that will be put on the product; and





énergétique

^{*}For electric motors, the energy efficiency report should indicate the product's unique motor identifier, or UMI, instead of a model number. For a definition of UMI, see Fact Sheet 6 – "Electric Motors and the Energy Efficiency Regulations."

1 Energy Efficiency Reports

- · gas water heaters;
- ground- or water-source heat pumps;
- integrated over/under washer-dryers;
- · internal water-loop heat pumps;
- large air conditioners, heat pumps and condensing units;
- · oil-fired boilers;
- oil-fired furnaces;
- oil-fired water heaters;
- packaged terminal air conditioners and heat pumps;
- refrigerators and combination refrigerator-freezers;
- · room air conditioners;
- single-phase and three-phase single-package central air conditioners and heat pumps; and
- single-phase and three-phase split-system central air conditioners and heat pumps.

The Regulations apply to an energy-using product even when it is part of a larger machine.



• specific information about the energy efficiency and energy-use characteristics of the product. Schedule IV of the *Energy Efficiency Regulations* sets out the exact information that must be provided for each type of product. Look for the product type in column I of Schedule IV, the relevant CSA or CGA standard in column II, and the type of information to include in the Section 5 report in column III.

When does a dealer have to make a report?

A dealer is required to file an energy efficiency report with NRCan only when a product is not already listed in NRCan's database. Dealers can check with NRCan (at the address, fax number or web site shown on the last page of this fact sheet) to find out if an energy-using product is already listed in NRCan's List of Compliant Products. In the case of electric motors, only one report need be filed for motors that have the same UMI.

Products that are included in NRCan's List of Compliant Products can be imported into Canada and shipped between provinces, provided no changes have been made to the product that affect its energy efficiency.

If a product is not yet listed with NRCan, the dealer must submit a report for the product before importing it or shipping it between provinces.

If the product was manufactured **before** February 3, 1995, the dealer is not required to send a report to NRCan, affix an EnerGuide label to the product or meet the federal energy efficiency standard.

How should a dealer send a report to NRCan?

A dealer may submit an energy efficiency report to NRCan by hand or mail, on hard copy, on diskette in Lotus 1-2-3 or Excel formats, or by fax to:

Residential, Regulatory and Information Programs Division Office of Energy Efficiency Natural Resources Canada 580 Booth Street, 18th Floor Ottawa, ON K1A 0E4 Fax: (613) 947-0373

NRCAN'S LIST OF COMPLIANT PRODUCTS

Product information contained in the energy efficiency report is entered into a database at NRCan to determine compliance with the *Energy Efficiency Regulations*. Products that are compliant may be imported into Canada or shipped between provinces.

NRCan's List of Compliant Products can be accessed at http://sec5.nrcan.gc.ca.

What does NRCan do with an energy efficiency report?

NRCan checks the information in an energy efficiency report to make sure that the product meets the prescribed energy efficiency standard. If it does, the product model is added to NRCan's List of Compliant Products.

If a product does not meet the prescribed energy efficiency level, NRCan will contact the dealer who is planning to import the product or ship it between provinces. NRCan will ask the dealer to correct the situation before the first importation or shipment of the product. NRCan will also request information from dealers who do not file the required energy efficiency reports, or who file incomplete reports.

Revenue Canada sends information about importations of regulated products to NRCan. This information is cross-matched with information in the database to determine compliance with the Regulations.

NRCan will instruct customs officials to stop the importation of a product that does not meet the prescribed energy efficiency standard.

Energy Efficiency Reports

Additional information

Copies of the Energy Efficiency Act (Statutes of Canada 1992, Chapter 36) and the Energy Efficiency Regulations (Canada Gazette, Part II, Volume 128, Number 22, November 2, 1994; Volume 129, Number 24, November 29, 1995; Volume 131, Number 25, December 10, 1997; and Volume 133, Number 1, January 6, 1999) are available in most public and university libraries and may be purchased in some bookstores.

This document is one of seven fact sheets providing information on the *Energy Efficiency Act* and the *Energy Efficiency Regulations*:

Fact Sheet 1 – "Energy Efficiency Reports Under Section 5 of the Energy Efficiency Act"

Fact Sheet 2 - "Importing an Energy-Using Product into Canada"

Fact Sheet 3 - "Verification Marks for Energy Efficiency"

Fact Sheet 4 - "Exemptions from the Energy Efficiency Regulations"

Fact Sheet 5 – "EnerGuide Labels for Energy-Using Products"

Fact Sheet 6 - "Electric Motors and the Energy Efficiency Regulations"

Fact Sheet 7 – "Lighting Products and the *Energy Efficiency Regulations*"

To obtain more information or to receive other fact sheets, contact:

Residential, Regulatory and Information Programs Division Office of Energy Efficiency Natural Resources Canada 580 Booth Street, 18th Floor Ottawa, ON K1A 0E4

Fax: (613) 947-0373

Helpful web sites

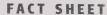
- Energy Efficiency Regulations: http://regulations.nrcan.gc.ca
- Office of Energy Efficiency: http://oee.nrcan.gc.ca

Cette fiche est également disponible en français sous le titre «Rapports visés à l'article 5 de la Loi sur l'efficacité énergétique».





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Importing

an Energy-Using Product into Canada

The Energy Efficiency Act and the Energy Efficiency Regulations set minimum energy performance levels for specified energy-using products and provide descriptions of the responsibilities of dealers for these products. For household appliances and room air conditioners, the Act and the Regulations also require dealers to attach an EnerGuide label to their product.

A dealer who imports a regulated energy-using product into Canada must, at the time of release, include on the customs release document (e.g., customs or commercial invoice, bill of sale, price list) specific information regarding the product, as well as the purpose of importation.

What must a dealer do before importing or shipping an energy-using product between provinces?

A dealer must ensure that an energy efficiency report has been received by Natural Resources Canada (NRCan) concerning the product. To do this, the dealer may contact NRCan, which maintains a database of all models of regulated energy-using products imported into Canada or shipped interprovincially. The database (called NRCan's List of Compliant Products) is compiled using the energy efficiency reports supplied to NRCan by dealers; it contains information on the energy efficiency of each product model or, in the case of electric motors, each "unique motor identifier." A listing in the database means that a product meets the prescribed energy efficiency standard. NRCan uses this information for border monitoring, inspection, enforcement and for publications, such as the *EnerGuide Directory*.

By checking with NRCan at the address or fax number at the end of this fact sheet, dealers can find out if a regulated energy-using product is listed in the NRCan database. For appliances and room air conditioners, the dealer can also check the current *EnerGuide Directory*; if a product is listed in the *EnerGuide Directory*, then it is listed in the database and meets the prescribed energy efficiency level. The most current *EnerGuide Directory* is available in some public libraries and at many utility companies.

WHO IS A "DEALER"?

A "dealer" is a person whose business:

- a. manufactures energy-using products in Canada; or
- b. imports energy-using products into Canada; or
- c. sells or leases energy-using products that are obtained, directly or indirectly, from a person who manufactures energy-using products in Canada or imports them into Canada.

REGULATED ENERGY-USING PRODUCTS

The Regulations specify the following as energy-using products:

- · automatic ice-makers;
- · clothes dryers;
- · clothes washers;
- dehumidifiers;
- dishwashers:
- electric motors (1 to 200 HP/0.746 to 150 kW);
- · electric ranges;
- electric water heaters;
- · fluorescent lamp ballasts;
- · general service fluorescent lamps;
- general service incandescent reflector lamps;
- freezers:
- · gas boilers;
- gas furnaces;
- gas ranges;

(continued overleaf)





- gas water heaters;
- ground- or water-source heat pumps;
- integrated over/under washer-dryers;
- internal water-loop heat pumps;
- large air conditioners, heat pumps and condensing units;
- · oil-fired boilers;
- oil-fired furnaces;
- · oil-fired water heaters;
- packaged terminal air conditioners and heat pumps;
- refrigerators and combination refrigerator-freezers;
- · room air conditioners;
- single-phase and three-phase single-package central air conditioners and heat pumps; and
- single-phase and three-phase split-system central air conditioners and heat pumps.

The Regulations apply to an energy-using product even when it is part of a larger machine.



If a product is not yet listed in the NRCan database, a dealer must complete an energy efficiency report and send it to NRCan before importing the product or shipping it between provinces.

Products that are listed in the NRCan database can be imported into Canada and shipped between provinces as long as the product remains unchanged with respect to its energy efficiency. If the product is modified in a way that affects its energy efficiency, a new energy efficiency report must be sent to NRCan.

If a product was manufactured before the compliance date for that product (see the *Guide to Canada's Energy Efficiency Regulations* for compliance dates), the dealer is not required to send an energy efficiency report to NRCan, affix an EnerGuide label to the product or meet the federal energy efficiency standard.

What information must be on the customs release document?

A dealer who is importing a regulated energy-using product into Canada must include the following information on the customs release document (e.g., customs or commercial invoice, bill of sale, price list):

- product type (from the list on page 4 of Guide to Canada's Energy Efficiency Regulations);
- model number*;
- brand name, if any;
- name and address of the dealer who is importing the product; and
- purpose for which the product is being imported. It must be for one of the following three purposes:
 - 1) for sale or lease in Canada without modification;
 - 2) for sale or lease in Canada after being modified to comply with energy efficiency standards; or
 - 3) for use as a component in a product being exported from Canada.

^{*} For electric motors, the customs release document should indicate the product's unique motor identifier, or UMI, instead of the model number. For a definition of UMI, see Fact Sheet 6 – "Electric Motors and the Energy Efficiency Regulations."

Importing

NOTE:

An extra copy of the document should be provided to the customs officer at the time of release. Revenue Canada, Customs, Excise and Taxation will forward this copy to NRCan.

Customs release information that is filed electronically with Revenue Canada will be processed and subsequently transmitted electronically to NRCan.

If the customs release document is not complete, or if the product does not meet the prescribed energy efficiency standard, the customs officer can refuse to allow the product to clear customs.

Dealers must always include the required information on the customs release document, regardless of when the product was manufactured.

Importing

Additional information

Copies of the Energy Efficiency Act (Statutes of Canada 1992, Chapter 36) and the Energy Efficiency Regulations (Canada Gazette, Part II, Volume 128, Number 22, November 2, 1994; Volume 129, Number 24, November 29, 1995; Volume 131, Number 25, December 10, 1997; and Volume 133, Number 1, January 6, 1999) are available in most public and university libraries and may be purchased in some bookstores.

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Helpful web sites

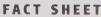
- Energy Efficiency Regulations: http://regulations.nrcan.gc.ca
- Office of Energy Efficiency: http://oee.nrcan.gc.ca

Cette fiche est également disponible en français sous le titre «Mode d'importation d'un matériel consommateur d'énergie au Canada».





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Government Publications ENERGY **EFFICIENCY**

Verification Marks

for Energy Efficiency

WHO IS A "DEALER"?

A "dealer" is a person whose business:

- a. manufactures energy-using products in Canada: or
- b. imports energy-using products into Canada; or
- c. sells or leases energy-using products that are obtained. directly or indirectly, from a person who manufactures energy-using products in Canada or imports them into Canada.

REGULATED ENERGY-USING PRODUCTS

The Regulations specify the following as energy-using products:

- automatic ice-makers;
- clothes dryers;
- clothes washers:
- dehumidifiers:
- dishwashers:
- electric motors (1 to 200 HP/0.746) to 150 kW);
- electric ranges;
- electric water heaters;
- fluorescent lamp ballasts;
- general service fluorescent lamps;
- general service incandescent reflector lamps;
- freezers;
- gas boilers;
- gas furnaces;
- gas ranges;

(continued overleaf)

The Energy Efficiency Act and the Energy Efficiency Regulations set minimum energy performance levels for specified energy-using products and provide descriptions of the responsibilities of dealers for these products. For household appliances and room air conditioners, the Act and the Regulations also require dealers to attach an EnerGuide label to their product.

All regulated energy-using products must carry an energy efficiency verification mark. Energy efficiency verification marks are different from safety certification marks.

What is an energy efficiency verification mark?

The energy efficiency verification mark indicates that the energy performance of the product has been verified. This mark must be the mark of either a certification organization or a province.

The certification organization must be accredited by the Standards Council of Canada (SCC) and must administer an acceptable energy performance verification program for the product.

Also, under some provincial laws, a province can issue a provincial label that indicates that the product meets the provincial energy efficiency levels. Natural Resources Canada (NRCan) accepts provincial labels as verification marks if the provincial energy efficiency standards are equivalent to, or exceed, the federal standards.

Where does the verification mark go?

The verification mark must be affixed to the exterior of the product.





- gas water heaters;
- ground- or water-source heat pumps;
- integrated over/under washer-dryers;
- · internal water-loop heat pumps;
- large air conditioners, heat pumps and condensing units;
- · oil-fired boilers:
- oil-fired furnaces:
- oil-fired water heaters;
- packaged terminal air conditioners and heat pumps;
- refrigerators and combination refrigerator-freezers;
- · room air conditioners;
- single-phase and three-phase single-package central air conditioners and heat pumps; and
- single-phase and three-phase split-system central air conditioners and heat pumps.

The Regulations apply to an energy-using product even when it is part of a larger machine.



What certification organizations are recognized by NRCan?

The Standards Council of Canada (SCC) has accredited these certification organizations for electrical and electronic products, fuel-burning equipment or gas-fired appliances and equipment:

- Air-Conditioning and Refrigeration Institute (ARI);
- CSA International (CSA);
- Intertek Testing Services NA Inc.;
- Intertek Testing Services NA Ltd.;
- Underwriters Laboratories Inc. (ULI).

You may check with the SCC at the address below to find out if changes have been made to the list above.

When does an energy efficiency verification mark go on a product?

A dealer can affix the energy efficiency verification mark on a product as soon as it has met the terms of the relevant energy performance verification program.

At the latest, the dealer must be sure that the verification mark is affixed to the product before the product leaves the dealer's possession or, if the dealer has passed the product on to a consignee, before it leaves the possession of the consignee.

For more information

For the names of certification organizations that are accredited by the SCC, contact:

Standards Council of Canada 45 O'Connor Street, Suite 1200 Ottawa, ON K1P 6N7 Tel.: (613) 238-3222

Fax: (613) 995-4564

Additional information

Copies of the Energy Efficiency Act (Statutes of Canada 1992, Chapter 36) and the Energy Efficiency Regulations (Canada Gazette, Part II, Volume 128, Number 22, November 2, 1994; Volume 129, Number 24, November 29, 1995; Volume 131, Number 25, December 10, 1997; and Volume 133, Number 1, January 6, 1999) are available in most public and university libraries and may be purchased in some bookstores.

This document is one of seven fact sheets providing information on the *Energy Efficiency Act* and the *Energy Efficiency Regulations*:

Fact Sheet 1 – "Energy Efficiency Reports Under Section 5 of the Energy Efficiency Act"

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Fact Sheet 6 - "Electric Motors and the Energy Efficiency Regulations"

Fact Sheet 7 – "Lighting Products and the *Energy Efficiency Regulations*"

To obtain more information or to receive other fact sheets, contact:

Housing, Buildings and Regulations Division Office of Energy Efficiency Natural Resources Canada 580 Booth Street, 18th Floor Ottawa, ON KIA 0E4 Fax: (613) 947-0373

Helpful web sites

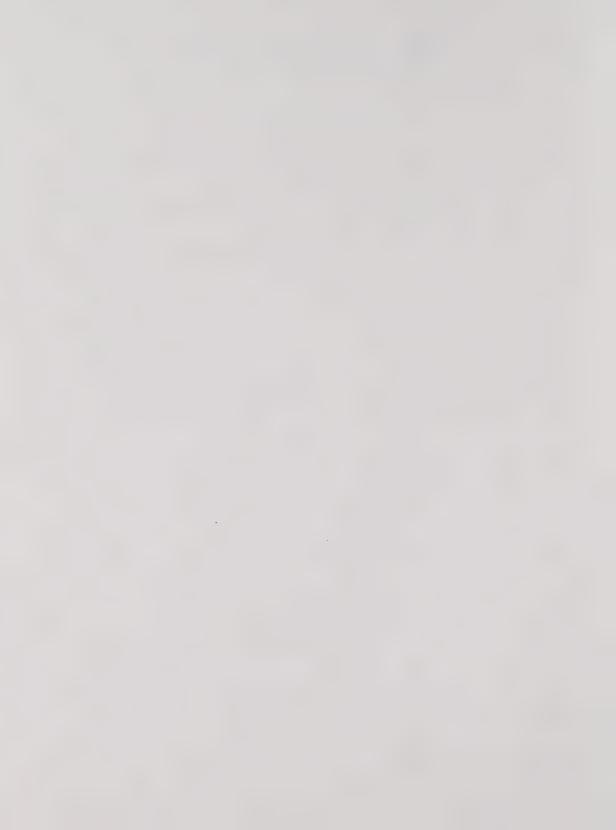
- Energy Efficiency Regulations: http://regulations.nrcan.gc.ca
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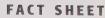
Cette fiche est également disponible en français sous le titre «Marques de vérification de l'efficacité énergétique».





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from the Energy Efficiency Regulations

The Energy Efficiency Act and the Energy Efficiency Regulations set energy efficiency standards for specified energy-using products and describe the responsibilities of dealers for these products. For household appliances and room air conditioners, the Act and the Regulations also require dealers to attach an EnerGuide label to their product.

All specified energy-using products must meet the prescribed energy efficiency standard. Dealers who import energy-using products or ship them between provinces must also ensure the product is listed in the Natural Resources Canada (NRCan) List of Compliant Products. If the product is not listed, the dealer must send an energy efficiency report to NRCan, providing information about the product and its energy efficiency.

Under certain conditions described in this fact sheet, a dealer is exempt from the above requirements.

Under what conditions are dealers exempted from sending an energy efficiency report and meeting the prescribed energy efficiency standard?

There are three reasons a dealer can be exempted from sending an energy efficiency report and meeting the energy efficiency standard:

1. The dealer is importing or shipping between provinces an energy-using product that will be modified to meet the energy efficiency standard.

The dealer has 90 days to ensure that the product is modified and meets the energy efficiency standard.

Within 120 days after the product was imported or shipped, the dealer must send an energy efficiency report to NRCan with the following information:

• product type (from the list on page 4 of Guide to Canada's Energy Efficiency Regulations);

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- b. imports energy-using products into Canada; or
- c. sells or leases energy-using products that are obtained, directly or indirectly, from a person who manufactures energy-using products in Canada or imports them into Canada.

REGULATED ENERGY-USING PRODUCTS

The Regulations specify the following as energy-using products:

- · automatic ice-makers;
- clothes dryers;
- clothes washers:
- dehumidifiers:
- dishwashers:
- electric motors (1 to 200 HP/0.746 to 150 kW);
- electric ranges;
- electric water heaters;
- fluorescent lamp ballasts:
- general service fluorescent lamps;
- · general service incandescent reflector lamps;
- freezers;
- gas boilers;
- · gas furnaces;
- gas ranges;

(continued overleaf)





Office of Energy

Efficiency

- gas water heaters;
- ground- or water-source heat pumps;
- integrated over/under washer-dryers;
- · internal water-loop heat pumps;
- large air conditioners, heat pumps and condensing units;
- oil-fired boilers;
- oil-fired furnaces:
- · oil-fired water heaters:
- packaged terminal air conditioners and heat pumps;
- refrigerators and combination refrigerator-freezers;
- · room air conditioners;
- single-phase and three-phase single-package central air conditioners and heat pumps; and
- single-phase and three-phase split-system central air conditioners and heat pumps.

The Regulations apply to an energy-using product even when it is part of a larger machine.



- model number*;
- brand name, if any;
- manufacturer;
- name of the organization or province that carried out the product energy performance verification and authorized the verification mark that will be put on the product; and
- specific information about the product's energy efficiency, as set out in Schedule IV of the *Energy Efficiency Regulations*. Look for the product name in column I of Schedule IV, the relevant CSA or CGA standard in column II, and the type of information to include in the energy efficiency report in column III.
- 2. The dealer is importing or shipping between provinces an energy-using product that will be incorporated into another product and then exported from Canada.

In this case, the dealer has 90 days to ensure that the product is exported from Canada.†

Within 120 days after the product was imported or shipped between provinces, the dealer must send NRCan proof that the product has been exported.† A copy of customs document B-13A or a copy of the bill of lading are acceptable proofs of export. The document submitted must include the following description:

- product type (from the list on page 4 of *Guide to Canada's Energy Efficiency Regulations*);
- model number*;
- brand name, if any; and
- manufacturer.
- * For electric motors, the energy efficiency report should indicate the product's unique motor identifier, or UMI, instead of the model number. For a definition of UMI, see Fact Sheet 6 "Electric Motors and the *Energy Efficiency Regulations.*"
- † Motor dealers are exempt from these time limits to export the product and to provide proof of export. However, the dealer must keep a record of the name and address of the person from whom the product was obtained, the quantity and description of the product, the date the product was received by the dealer, the date the dealer sold the product, and the name and address of the purchaser. Information concerning a non-compliant motor must be provided to NRCan on request. As well, dealers may not sell at the retail level in Canada or lease in Canada a non-compliant motor or a product that contains a non-compliant motor.

3. The dealer is importing or shipping between provinces only to export from Canada.

Dealers who import energy-using products into Canada, or ship them from one province to another, in order to export them directly out of Canada, do not have to comply with energy efficiency labelling or reporting requirements.

How will NRCan monitor exemptions?

For all importations of energy-using products, dealers must indicate the purpose of import on the customs release document. The purpose can be one of the following:

- for sale or lease in Canada without modification;
- for sale or lease in Canada after being modified to comply with the prescribed energy efficiency standard; or
- for use as a component in a product being exported from Canada.

For shipments between provinces, NRCan will conduct marketplace monitoring and inspections and will work in close cooperation with provincial authorities.

Using these sources of information, NRCan will monitor energyusing products that have been imported into Canada or shipped between provinces for modification or export. NRCan will contact dealers if the necessary reports have not been submitted or if more information is required.

NOTE:

If a product was manufactured before the compliance date for that product (see the *Guide to Canada's Energy Efficiency Regulations* for compliance dates), the dealer is not required to send an energy efficiency report to NRCan, affix an EnerGuide label to the product or meet the federal energy efficiency standard. However, when importing, the dealer must include the required information on the customs release document, regardless of the date of manufacture.

Additional information

Copies of the Energy Efficiency Act (Statutes of Canada 1992, Chapter 36) and the Energy Efficiency Regulations (Canada Gazette, Part II, Volume 128, Number 22, November 2, 1994; Volume 129, Number 24, November 29, 1995; Volume 131, Number 25, December 10, 1997; and Volume 133, Number 1, January 6, 1999) are available in most public and university libraries and may be purchased in some bookstores.

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Fact Sheet 7 – "Lighting Products and the *Energy Efficiency Regulations*"

To obtain more information or to receive other fact sheets, contact:

Residential, Regulatory and Information Programs Division Office of Energy Efficiency Natural Resources Canada 580 Booth Street, 18th Floor Ottawa, ON KIA 0E4 Fax: (613) 947-0373

Helpful web sites

- Energy Efficiency Regulations: http://regulations.nrcan.gc.ca
- Office of Energy Efficiency: http://oee.nrcan.gc.ca

Cette fiche est également disponible en français sous le titre «Exemptions des dispositions du Règlement sur l'efficacité énergétique».





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FACT SHEET



EnerGuide Labels

for Energy-Using Products

WHO IS A "DEALER"?

A "dealer" is a person whose

- a. manufactures energy-using products in Canada; or
- b. imports energy-using products into Canada: or
- c. sells or leases energy-using products that are obtained, directly or indirectly, from a person who manufactures energy-using products in Canada or imports them into Canada.

PRODUCTS THAT MUST HAVE AN ENERGUIDE LABEL:

- clothes dryers
- clothes washers
- dishwashers
- electric ranges (ovens, cooktops)
- freezers
- integrated over/under washer-
- · refrigerators and combination refrigerator-freezers
- room air conditioners

The Energy Efficiency Act and the Energy Efficiency Regulations set minimum energy performance levels for specified energy-using products and provide descriptions on the responsibilities of dealers of these products. For major household appliances and room air conditioners, the Act and the Regulations also require dealers to attach an EnerGuide label to their product.

Products (see product list shown at right) manufactured on or after February 3, 1995, (December 31, 1998, for compact clothes dryers) must be labelled with the black and white EnerGuide label.

Who must label and when?

A dealer who imports an appliance, or who ships it from one Canadian province to another, must be sure the appliance is properly labelled.

Many dealers find it cost-efficient to label the appliance as part of the production line process; i.e., at the manufacturing level.

The label must remain on the product until it is sold to the consumer at the retail level.

Purpose of the EnerGuide label

The EnerGuide label shows the consumer the estimated annual energy consumption of the household appliance in kilowatt hours. Room air conditioner labels serve the same purpose by showing the energy efficiency ratio (EER) of the particular model. This information allows consumers to compare products and make choices that will save both money and energy, and thus encourage the sale and availability of energy-efficient products.





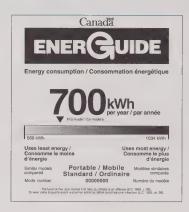
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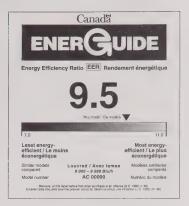
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Detailed specifications are also included in a labelling instructions package, which is available from the EnerGuide Office, Natural Resources Canada, at the address listed at the end of this fact sheet.







Principal elements of the EnerGuide label

- 1. a) for major household appliances the model's estimated annual energy consumption in kilowatt hours, or
 - b) for room air conditioners the model's estimated energy efficiency ratio (EER);
- 2. a bar scale comparing this model's energy consumption to other models that are available in the marketplace and are part of the same test group;
- 3. the energy consumption of the most energy-efficient model and the least energy-efficient model in the same test group in accordance with the labelling scale published annually by Natural Resources Canada (NRCan) (the energy consumption figure is the same as the one provided to NRCan in the energy efficiency report; see Fact Sheet 1);
- 4. the test group type and size category (or cooling capacity category); and
- 5. the model number.

Size, shape, colour and positioning of the EnerGuide label

The Regulations specify the exact size, shape and colour of the EnerGuide label, the size of the print type on the label, the kind of label (adhesive, flap or hang tag) and how it is to be affixed to the product.

The EnerGuide label must be easy to see when the appliance is viewed from the front.

EnerGuide directories and other sources of information on energy efficiency

There are two versions of the *EnerGuide Directory*: one for major household appliances and the other for room air conditioners. These directories provide information about the energy efficiency of products, allowing consumers, salespeople, distributors and manufacturers to compare the energy efficiency of different models. The directories are available from NRCan and from some public libraries and utility companies.

Consumer publications such as the *Consumer's Guide to Buying and Using Energy-Efficient Household Appliances*, as well as guides for office equipment and household lighting, are available from NRCan.

Also, there are EnerGuide travelling exhibits placed at key home shows across Canada. The purpose of these exhibits is to promote the purchase and use of energy-efficient appliances and to provide information on the Regulations and on labelling.

Additional information

Copies of the Energy Efficiency Act (Statutes of Canada 1992, Chapter 36) and the Energy Efficiency Regulations (Canada Gazette, Part II, Volume 128, Number 22, November 2, 1994; Volume 129, Number 24, November 29, 1995; Volume 131, Number 25, December 10, 1997; and Volume 133, Number 1, January 6, 1999) are available in most public and university libraries and may be purchased in some bookstores.

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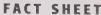
- Energy Efficiency Regulations: http://regulations.nrcan.gc.ca
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Electric Motors

and the Energy Efficiency Regulations

The Energy Efficiency Act and the Energy Efficiency Regulations establish minimum energy performance levels for specified products and set out the responsibilities of dealers for these products. Dealers of electric motors from 1 to 200 HP (0.746 to 150 kW) must ensure that the motors meet the energy efficiency standard quoted in the Regulations and must comply with a number of other requirements in order to import these products or ship them interprovincially for sale or lease in Canada.

What motors are regulated?

Certain National Electrical Manufacturers Association (NEMA) motors have been regulated since February 3, 1995. Effective November 27, 1997, the Energy Efficiency Regulations were amended to include International Electrotechnical Commission (IEC) motors. This amendment also increased the minimum energy performance levels that motors must meet.

For explosion-proof motors and motors contained within an integral gear assembly, the effective date of the Regulations is November 27, 1999.

A complete definition of the types of motors covered by the Regulations is provided on the following page.

What is the energy efficiency standard quoted in the Regulations?

Regulated electric motors being imported into Canada or shipped between provinces must meet the minimum nominal efficiency values prescribed in Schedule I, Parts 2 and 3, of the Regulations.

If a motor has a power rating that falls between two ratings in Part 2 or 3, the standard for the next lowest power rating must be met.

WHO IS A "DEALER"?

A "dealer" is a person whose business:

- a. manufactures energy-using products in Canada; or
- b. imports energy-using products into Canada; or
- c. sells or leases energy-using products that are obtained. directly or indirectly, from a person who manufactures energy-using products in Canada or imports them into Canada.





DEFINITION OF REGULATED MOTORS

DEFINITION OF RECODETED MOTORS	
NEMA MOTORS	IEC MOTORS
Continuous duty	Maximum continuous rating, duty type S1
Open or enclosed IP Code 00 to 66	Open or enclosed IP code 00 to 66
Polyphase	Three-phase
Squirrel cage	Cage
NEMA design A or B	IEC design N
Single speed	Single speed
2, 4 or 6 poles	2, 4 or 6 poles
Rated voltage ≤ 600 volts	Rated voltage ≤ 600 volts
Rated frequency 60 hz or 50/60 hz	Rated frequency 60 hz or 50/60 hz
1 to 200 HP	0.746 to 150 kW
T frame	Frame 90 and above
Standard, R and S shaft	
Foot-mounted, type C face-mounted or type D flange-mounted	Foot- or flange-mounted



What if a regulated electric motor is being imported or shipped interprovincially as a component of another product?

The Regulations apply to stand-alone motors and to motors that have been incorporated into another product before being imported into Canada or shipped between provinces. Dealers should ensure that manufacturers of products that incorporate a regulated motor are aware that the motor must meet the regulatory requirements.

- the date the product was received by the dealer;
- the date the dealer sold the product; and
- the name and address of the purchaser.

Information concerning a non-compliant motor must be provided to NRCan on request. As well, dealers may not sell at the retail level in Canada or lease in Canada a non-compliant motor or a product that contains a non-compliant motor.

For more information

For the names of certification organizations that are accredited by the SCC, contact:

Standards Council of Canada 45 O'Connor Street, Suite 1200 Ottawa, ON K1P 6N7

Tel.: (613) 238-3222 · Fax: (613) 995-4564

6

Is an energy efficiency verification mark required, and who is responsible for applying the mark?

Before a motor or shipment of motors leaves the dealer's possession (or the possession of a consignee), the dealer must ensure that a verification mark is affixed to the exterior of the motors. This mark indicates that the motors have been verified to meet the regulated energy efficiency standards. The mark must be authorized by a Standards Council of Canada (SCC) accredited certification organization that administers an energy performance verification program for motors. As of January 1998, CSA International (CSA) and Underwriters Laboratories Incorporated (ULI) offer such a program for electric motors. For additional information, please contact the SCC at the address provided under "For more information" at the end of this fact sheet.

What information is required in an energy efficiency report for electric motors?

Section 5 of the *Energy Efficiency Act* requires dealers to submit an energy efficiency report to NRCan before importing a regulated product or shipping it between provinces. The report must describe the product and provide information on its energy performance (for more information, refer to Fact Sheet 1 – "Energy Efficiency Reports Under Section 5 of the *Energy Efficiency Act*"). For electric motors, this energy efficiency report must include:

- the product name (electric motor from 1 to 200 HP/ 0.75 to 150 kW);
- the brand name;
 - the product's "unique motor identifier," or UMI (see sidebar);
- the manufacturer's name:
- the name of the organization that carried out the product verification and authorized the energy efficiency verification mark that will be affixed to the product; and
- the nominal efficiency value for the least efficient model of the particular motor rating or UMI (i.e., only one report need be filed for all motors that have the same UMI).

WHAT IS A UMI?

The UMI replaces the motor's model number when reporting information in an energy efficiency report or on a customs release document. The UMI is a combination of the manufacturer's name and the motor rating. In other words, it comprises the following information, in this sequence:

- . the name of the manufacturer;
- the power of the motor (indicated in HP for NEMA motors and in kW for IEC motors);
- . the number of poles; and
- whether the motor is open or enclosed.

Are there any other reporting requirements?

Under Part VI of the Regulations, dealers who are importing a regulated motor or a product that contains a regulated motor are required to include the following information on the customs release document (customs/commercial invoice, bill of lading, etc.):

- a statement that the product being imported is a motor;
- the unique motor identifier (UMI) for the motor;
- the brand of the motor;
- the address of the dealer who is importing the motor; and
- the purpose for which the dealer is importing the motor. This must be one of the following:
 - 1) for sale or lease in Canada without modification;
 - 2) for sale or lease in Canada after being modified to comply with the prescribed energy efficiency standard; or
 - 3) for use as a component in a product being exported from Canada.

A copy of the completed customs release document is to be provided to Revenue Canada. If any of this information is incomplete, the shipment may be detained until such information is provided. Note: the imported product information must match the information previously provided in the energy efficiency report.

Are there any exemptions from the Regulations?

Under certain circumstances, dealers of regulated products may be exempt from ensuring that the product meets the prescribed energy efficiency standard or from filing an energy efficiency report with NRCan (for details, see Fact Sheet 4 – "Exemptions from the *Energy Efficiency Regulations*").

Specifically, non-compliant motors may be imported into Canada or shipped between provinces if the motors are to be incorporated into another product that will be exported from Canada. However, the dealer must keep a record of:

- the name and address of the person from whom the product was obtained:
- the quantity and description of the product;

Additional information

Copies of the Energy Efficiency Act (Statutes of Canada 1992, Chapter 36) and the Energy Efficiency Regulations (Canada Gazette, Part II, Volume 128, Number 22, November 2, 1994; Volume 129, Number 24, November 29, 1995; Volume 131, Number 25, December 10, 1997; and Volume 133, Number 1, January 6, 1999) are available in most public and university libraries and may be purchased in some bookstores.

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Fax: (613) 947-0373

Helpful web sites

- Energy Efficiency Regulations: http://regulations.nrcan.gc.ca
- Office of Energy Efficiency: http://oee.nrcan.gc.ca

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FACT SHEET
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Lighting Products

and the Energy Efficiency Regulations

The Energy Efficiency Act and the Energy Efficiency Regulations establish minimum energy performance levels for specified products and set out the responsibilities of dealers for these products. Fluorescent lamp ballasts were one of the products included under the initial set of Energy Efficiency Regulations. These Regulations have since been amended to include energy efficiency standards for fluorescent lamps and incandescent reflector lamps. The regulated lamps are those that are used primarily in general area lighting and that are manufactured in large volumes.

This fact sheet provides general information on the requirements of the Regulations for lighting products. Refer to the Regulations for more detailed information.

What products are regulated?

The Regulations apply to:

- **fluorescent lamp ballasts** designed for an input of 120, 277 or 347 volts and intended for operation with F32T8, F34T12, F40T10 or F40T12 rapid-start lamps and F96T12IS, F96T12ES, F96T12HO or F96T12HO/ES lamps;
- fluorescent lamps that are:
 - 1200 mm (4 ft.) straight-shaped and 560 to 635 mm (2 ft.)
 U-shaped rapid-start lamps with medium bi-pin bases and a nominal power of 28 watts or more;
 - 2400 mm (8 ft.) high-output rapid-start lamps with recessed double-contact bases, a nominal current of 0.8 amperes and a nominal power of 95 watts or more; and
 - 2400 mm (8 ft.) instant-start lamps with single-pin bases and a nominal power of 52 watts or more (commonly known as slimline lamps);

WHO IS A "DEALER"?

A "dealer" is a person whose business:

- a. manufactures energy-using products in Canada; or
- b. imports energy-using products into Canada; or
- c. sells or leases energy-using products that are obtained, directly or indirectly, from a person who manufactures energy-using products in Canada or imports them into Canada.

NOTE:

Certain fluorescent lamps are not subject to the Regulations. These include lamps with a colour-rendering index of 82 or greater and lamps for special applications, such as plant lamps, cold-temperature lamps, coloured lamps, impact-resistant lamps and lamps for use in reprographic equipment.





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Lighting Products

NOTE:

Certain reflector lamps are not subject to the Regulations. These include coloured lamps, rough service lamps, vibration-resistant lamps, impactresistant lamps, "hobby" lamps (e.g., for plants or aquariums), infrared heat lamps and lamps for heat-sensitive applications.



• incandescent reflector lamps that have R, PAR or similar shapes (ER and BR shapes are excluded), E26 medium screw bases, diameters greater than 70 mm (2-3/4 in.), a nominal voltage or a voltage range at least partially between 100 and 150 volts, and a nominal power of 40 to 205 watts.

What is the energy efficiency standard quoted in the Regulations?

Fluorescent lamp ballasts must meet the minimum efficiency values established in the CSA International (CSA) standard CAN/CSA-C654-M91, entitled "Fluorescent Lamp Ballast Efficacy Measurements," clause 4: "Ballast Efficacy Factor." Performance standards for general service fluorescent lamps and incandescent reflector lamps are found in Schedule I of the *Energy Efficiency Regulations* as amended November 7, 1995.

When did the lighting-product Regulations come into force?

The Regulations covering **fluorescent lamp ballasts** came into effect on February 3, 1995. The effective date for the Regulations covering **fluorescent lamps** was February 1, 1996, and for **incandescent reflector lamps**, April 1, 1996. Regulated products manufactured on or after these dates cannot be imported into Canada or shipped between provinces unless they meet the regulatory requirements. After December 31, 1996, all regulated lamps imported into Canada or shipped interprovincially – regardless of their date of manufacture – must comply with the Regulations.

Do the Regulations apply to lamps that are part of a lighting fixture?

The Regulations apply to all regulated lighting products that are being imported or shipped interprovincially, regardless of whether they are shipped as stand-alone products or as a component of another product. Dealers should ensure that lighting fixture manufacturers are aware that any lamps that accompany their products must meet the regulated energy efficiency standard.

Additional information

Copies of the Energy Efficiency Act (Statutes of Canada 1992, Chapter 36) and the Energy Efficiency Regulations (Canada Gazette, Part II, Volume 128, Number 22, November 2, 1994; Volume 129, Number 24, November 29, 1995; Volume 131, Number 25, December 10, 1997; and Volume 133, Number 1, January 6, 1999) are available in most public and university libraries and may be purchased in some bookstores.

This document is one of seven fact sheets providing information on the *Energy Efficiency Act* and the *Energy Efficiency Regulations*:

Fact Sheet 1 – "Energy Efficiency Reports Under Section 5 of the Energy Efficiency Act"

Fact Sheet 2 – "Importing an Energy-Using Product into Canada"

Fact Sheet 3 - "Verification Marks for Energy Efficiency"

Fact Sheet 4 – "Exemptions from the Energy Efficiency Regulations"

Fact Sheet 5 – "EnerGuide Labels for Energy-Using Products"

Fact Sheet 6 - "Electric Motors and the Energy Efficiency Regulations"

Fact Sheet 7 – "Lighting Products and the *Energy Efficiency Regulations*"

To obtain more information or to receive other fact sheets, contact:

Residential, Regulatory and Information Programs Division Office of Energy Efficiency Natural Resources Canada 580 Booth Street, 18th Floor Ottawa, ON K1A 0E4 Fax: (613) 947-0373

Helpful web sites

- Energy Efficiency Regulations: http://regulations.nrcan.gc.ca
- Office of Energy Efficiency: http://oee.nrcan.gc.ca

Cette fiche est également disponible en français sous le titre «Les appareils d'éclairage et le Règlement sur l'efficacité énergétique».





Her Majesty the Queen in Right of nada, 1999

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What are the verification mark requirements?

Under the *Energy Efficiency Regulations*, all regulated energy-using products must carry an energy efficiency verification mark. Before a regulated lighting product leaves the dealer's possession, the dealer must ensure that a verification mark is affixed to the product. For lamps only, the verification mark may be placed on either the product or the product packaging. In the case of ballasts, the verification mark must appear on the product itself.

What information must dealers report to Natural Resources Canada?

Section 5 of the *Energy Efficiency Act* requires that dealers who are importing a regulated product or transporting it from one province to another must submit a report to NRCan describing the product and providing information on its energy efficiency (for more information, refer to Fact Sheet 1 – "Energy Efficiency Reports Under Section 5 of the *Energy Efficiency Act*"). For all regulated lighting products, this energy efficiency report must include the product name, brand name, model number, manufacturer, and the name of the organization or province that carried out the product verification and authorized the verification mark that will be put on the product.

In the case of **fluorescent lamps**, dealers must also provide:

- the lamp abbreviation (according to the ANSI C78.1 Annex A, or ANSI C78.3 Annex A nomenclature systems);
- the lamp type's nominal power;
- its nominal length;
- its diameter:
- its shape (straight or U-shaped);
- its base type (medium bi-pin, recessed double-contact base or single pin);
- its correlated colour temperature;
- its average colour-rendering index; and
- its average lamp efficacy (as stipulated in the Regulations).

Reports for incandescent reflector lamps must provide:

- a description of the lamp;
- the lamp class (according to ANSI C78.21 Table I of Part II);
- its nominal power and voltage; and
- the average lamp efficacy (as stipulated in the Regulations).

Reports for fluorescent lamp ballasts must indicate:

- the voltage input for the ballast;
- the ballast efficacy factor;
- the type of lamp(s) the ballast is designed to operate; and
- the number of lamps the ballast is designed to operate.

Are there other specific reporting requirements?

Dealers who are **importing** a regulated lighting product are required to include the following information on the customs release document (customs/commercial invoice, bill of lading, etc.):

- a statement that the product being imported is (or contains) a fluorescent lamp ballast, a general service fluorescent lamp or a general service incandescent reflector lamp;
- the model number of the product;
- the brand, if any, of the product;
- the address of the dealer who is importing the product; and
- the purpose for which the dealer is importing the product. This must be one of the following:
 - 1) for sale or lease in Canada without modification;
 - 2) for sale or lease in Canada after being modified to comply with energy efficiency standards; or
 - 3) for use as a component in a product being exported from Canada.

A copy of the completed customs release document is to be provided to Canada Customs. If any of this information is incomplete, the shipment may be detained at Customs until such information is provided. **Note: the imported product information must match the information provided in the energy efficiency report.**





